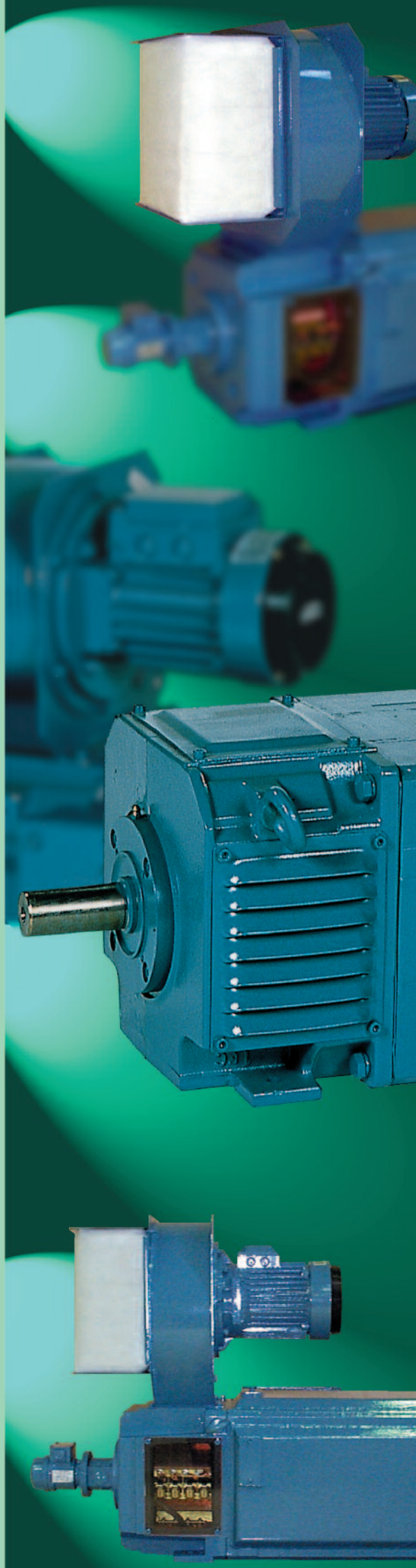


DC Motors

DMP catalogue
1-200 kW, 5-1000 Nm

T-T Electric



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Introduction

DMP d.c. motors are fully laminated, 2 or 4 pole, square frame.

Output: 1-200 kW

Torque: 5-1000 Nm

DMP motor range:

| Frame size DMP | Core lengths |
|-------------------|-------------------------|
| 112-2 | MA, LA |
| 112-4 | M, L |
| 132-2 | M |
| 132-4 | S, M, L, LB |
| 160-4 | S, SO, M, MO, L, LO, LB |
| 180-4 | A, B, C, D, E, F |

Type designation example :

DMP 180-4E

DM = DC motor
 P = Motor type
 180 = Centre height in mm
 4 = Number of poles
 E = Core length

Basic design characteristics

- Fully laminated stator, main poles and interpoles.
- Compact square frame design.
- Easy installation of accessories.
- Large openings in end shields for easy inspection.
- Stator windings of varnish insulated copper wire.
- Laminated armature core of high grade insulated electro-plate.
- Large number of cooling ducts in armature provide excellent cooling.
- Scrambled armature laminations for low torque ripples.
- Armature windings of varnished copper designed for low commutating stresses and high mechanical strength.
- Armature is impregnated to ensure high degree of heat transfer.
- Brush holders with spring loaded pressure fingers.
- Prepared for a number of options and accessories ensuring high flexibility.
- Painting with excellent corrosion resistant properties.
- Conforms with IEC standards.
- Available as NEMA standard.
- CSA approved.

Options

| Frame size | DMP | 112-2 | 112-4 | 132-2 | 132-4 | 160 | 180 |
|---------------------------------------|-------------------------------------|-------|-------|-------|-------|-----|-----|
| Cooling forms | | | | | | | |
| IC06 | (IP23) Force ventilated | 0 | 0 | 0 | 0 | 0 | 0 |
| IC17 | (IP23) Single pipe ventilated | 0 | 0 | 0 | 0 | 0 | 0 |
| IC37 | (IP54) Double pipe ventilated | 0 | 0 | 0 | 0 | 0 | 0 |
| IC410 | (IP54) Totally enclosed | 0 | 0 | 0 | 0 | 0 | 0 |
| IC416 | (IP54) Totally enclosed, fan cooled | 0 | 0 | 0 | 0 | 0 | 0 |
| IC666 | (IP54) Air-air cooled | 0 | 0 | 0 | 0 | 0 | 0 |
| IC86W | (IP54) Air-water cooled | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Other cooling forms available</i> | | | | | | | |
| Protection | | | | | | | |
| IP55 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Mounting forms | | | | | | | |
| IM1001 | Horizontal foot | 0 | 0 | 0 | 0 | 0 | 0 |
| IM1002 | Horizontal foot, two shaft ends | 0 | 0 | 0 | 0 | 0 | 0 |
| IM2001 | Horizontal foot and flange | 0 | 0 | 0 | 0 | 0 | 0 |
| IM2011 | Vertical foot and flange | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Other mounting forms available</i> | | | | | | | |
| Modifications and accessories | | | | | | | |
| Compound winding | | 0 | 0 | 0 | 0 | 0 | 0 |
| Pressure switch | | 0 | 0 | 0 | 0 | 0 | 0 |
| Temperature sensor, interpole | | 0 | 0 | 0 | 0 | 0 | 0 |
| Temperature sensor, field winding | | 0 | 0 | 0 | 0 | 0 | 0 |
| Bearing sensor | | 0 | 0 | 0 | 0 | 0 | 0 |
| Grounding brush | | 0 | 0 | 0 | 0 | 0 | 0 |
| Heating element | | 0 | 0 | 0 | 0 | 0 | 0 |
| Brush wear sensor | | 0 | 0 | 0 | 0 | 0 | 0 |
| Special shaft | | 0 | 0 | 0 | 0 | 0 | 0 |
| Roller bearing d-end | | 0 | 0 | 0 | 0 | 0 | 0 |
| Shaft seal, d-end | | 0 | 0 | 0 | 0 | 0 | 0 |
| Special balance Class 'R' | | 0 | 0 | 0 | 0 | 0 | 0 |
| Special paint (RAL colour) | | 0 | 0 | 0 | 0 | 0 | 0 |
| Special corrosion protection | | 0 | 0 | 0 | 0 | 0 | 0 |
| Transparent inspection cover | | 0 | 0 | 0 | 0 | 0 | 0 |
| Brake | | 0 | 0 | 0 | 0 | 0 | 0 |
| Gearbox | | 0 | 0 | 0 | 0 | 0 | 0 |
| Tachos with coupling | | | | | | | |
| REO 444R1 | (60v/1000min ⁻¹) | 0 | 0 | 0 | 0 | 0 | 0 |
| TDP 0.2 LT-4 | (60v/1000min ⁻¹) | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Others available</i> | | | | | | | |
| Pulse generators | | | | | | | |
| POG 9 D | (1-1250 ppr) | 0 | 0 | 0 | 0 | 0 | 0 |
| HG650 or DG60L | (1024 ppr) | 0 | 0 | 0 | 0 | 0 | 0 |
| <i>Others available</i> | | | | | | | |

Application data

Standards

IEC 34 - IEC 72 etc.

Insulation

Class H

Temperature rise

Class F

Balance

IEC 34-14 grade 'N' standard.
Grade 'R' on request.

Overload capacity

180% xFLC for
15 sec. every 5 minutes
30 sec. every 30 minutes

Terminal box

Standard position: On right hand side (facing D-end).
Mounting of terminal box on top or left hand side on request.
DMP motors are delivered with a large terminal box IP55 including knockout openings:

DMP 112 – 132

2 x Ø 28.5 (PG 21)

2 x Ø 20.5 (PG 13.5)

Cable entry from Drive end.

DMP 160 – 180

2 x Ø 55 (PG 42)

4 x Ø 28.5 (PG 21)

Cable entry from above or below.

Blower position

Standard: On top of the motor at the non-drive end.
Other positions on request.

Blower is supplied without filter as standard.
Filter on request.

Bearings

Grease lubricated ball bearings as standard.
For belt drive please contact our sales offices.

Heat exchangers

Air/water (IC86W):

Air/water exchangers are especially recommended for polluted environment.

Standard is for clean water.
For corrosive water on request.

Position on top of the motor as standard. Fan motor at N-end.
Water connection flanges at right hand side (facing D-end).
Max. water pressure 10 PSI
Max. inlet water temperature 25°C. A water temperature rise of 8-10°C must be expected.

For motors with low loads or a low incoming water temperature, a temperature regulator is recommended to avoid condensation in the cooling air circuit and to minimize water consumption.

A constant speed fan circulates the internal cooling air. A polyamide filter is provided for carbon dust.

Detailed heat exchanger information on request.

Air/air (IC666):

Air/air heat exchangers are recommended where water is not available for cooling purposes.

The output of a motor with air/air exchanger will be approximately 20% lower compared to cooling forms IC06/17/37/86W.

Position: On top of the motor as standard.

Two constant speed fans at top of the heat exchanger to provide air circulation for the outer and inner circuits.

Application data

Fan blower motor data

| DMP | $U_{net}, f_{net} (Y)$ | $I_Y (A)$ | $U_{net}, f_{net} (\Delta)$ | $I_{\Delta} (A)$ | $P_{fan} (kW)$ | $W_{fan} (kg)$ |
|---------------------|------------------------|-----------|-----------------------------|------------------|----------------|----------------|
| 112 | 3x380-420 V. 50 Hz | 0.70 | 3x220-240 V. 50 Hz | 1.20 | 0.25 | 7 |
| 132-2M | 3x440-480 V. 60 Hz | 0.70 | 3x250-280 V. 60 Hz | 1.20 | 0.30 | |
| 132-4S/M/L | 3x500 V. 50 Hz | 0.60 | - | - | 0.25 | |
| 132-4LB | 3x380-420 V. 50 Hz | 2.10 | 3x220-240 V. 50 Hz | 3.60 | 0.75 | 16 |
| 160-4S/M/L | 3x440-480 V. 60 Hz | 2.00 | 3x250-280 V. 60 Hz | 3.50 | 0.90 | |
| | 3x500 V. 50 Hz | 1.40 | - | - | 0.75 | |
| 160-4LB | 3x380-420 V. 50 Hz | 2.90 | 3x220-240 V. 50 Hz | 5.00 | 1.30 | 18 |
| | 3x440-480 V. 60 Hz | 2.80 | 3x250-280 V. 60 Hz | 5.00 | 1.50 | |
| | 3x500 V. 50 Hz | 2.30 | - | - | 1.30 | |
| 180-4A/B/C/D | 3x380-420 V. 50 Hz | 3.00 | 3x220-240 V. 50 Hz | 5.20 | 1.50 | 18 |
| | 3x440-480 V. 60 Hz | 2.90 | 3x250-280 V. 60 Hz | 5.00 | 1.75 | |
| | 3x500 V. 50 Hz | 2.70 | - | - | 1.50 | |
| 180-4E/F | 3x380-420 V. 50 Hz | 5.80 | 3x220-240 V. 50 Hz | 10.0 | 2.70 | 20 |
| | 3x440-480 V. 60 Hz | 5.80 | 3x250-280 V. 60 Hz | 10.0 | 3.00 | |
| | 3x500 V. 50 Hz | 4.60 | - | - | 2.70 | |

| | |
|-----------------------------|------------------------------------|
| $U_{net}, f_{net} (Y)$ | Supply voltage, frequency Y |
| I_Y | Current Y |
| P_{fan} | Power |
| $U_{net}, f_{net} (\Delta)$ | Supply voltage, frequency Δ |
| I_{Δ} | Current Δ |
| W_{fan} | Total fan weight |

Bearings

| DMP | Drive end | | Non-drive end |
|-----------------------|--------------|----------------|------------------|
| | Ball bearing | Roller bearing | |
| 112 | 6308-C3 | NU 308 ECP | 6208-2RS 1-HT-C3 |
| 132 | 6309-C3 | NU 309 ECP | 6307-2RS 1-HT-C3 |
| 160 | 6310-C3 | NU 310 ECP | 6309-2RS 1-HT-C3 |
| 180-4A/B/C/D/E | 6215-C3 | NU 2215-ECP | 6312-2RS1-HT-C3 |
| 180-4F | 6315-C3 | NU 315 ECP | 6312-2RS1-HT-C3 |

Output data

Select motor frame size against voltage, output and speed. For intermediate output, take the nearest higher output listed under the next frame size. For intermediate speed take the next lower speed listed within the output required. The output lists are based on:

- **Cooling forms**
IC06/IC17/IC37/IC86W.
- **The armature circuit resistance listed is for duty warm condition.**
- **The inductance listed is for the armature circuit.**
- **Motor supply from 3-phase fully controlled thyristor.**

Constant power/constant torque

The full field or base speed and maximum speed through field control with constant output is listed for each winding.

Armature voltage: For -10% the output and speed are proportional to the voltage.

For higher shunt field ranges, please refer to sales offices.

With a combination of armature voltage/shunt control greater constant power ranges can be obtained.

Duty cycles

Ratings: All outputs are duty type S 1 and motors are fed from a 3-phase fully controlled thyristor where the form factor is 1.05.

Field windings

All motors in the output lists have separate excitation, the field being shunt wound.

Compound winding can be supplied on request.

Motors with compound winding may have nominal data which differ from those shown in the output lists.

Armature voltage

For other armature voltages, please contact our sales offices.

Ambient temperature and altitude

Outputs in this catalogue are based on max. 40°C ambient temperature and motor located at max. 1000 metres above sea level.

If ambient temperature and/or altitude is higher, contact our sales office.

NEMA output data

NEMA catalogue available on request.

Stock motors

Motors indicated with the sign* in the output data lists are available from stock and can be delivered promptly.

The stock motors are available according to following specification. Motor fan, standard tachogenerator and coupling can be fitted on request.

- **IM 1001, IP 23, IC 17, designed for cooling air inlet at either D or N-end (when possible, cooling air inlet should always be at the D-end of DMP motors).**
- **Cylindrical roller bearing on D-end.**
- **Terminal box on right hand side (facing D-end).**
- **Balanced with half key.**
- **Thermostats NC.**
- **PTC thermistors.**
- **Name plate and documents in English.**
- **Rating data as standard motors but field weakening is only allowed up to 25 % overspeed for stock motors.**
- **Stock motors have a parallel /serial connection suitable for an excitation voltage of 170-180-190/340-360-380 V.**
- **Stock motors have reinforced impregnation.**

Output data

Technical data

| | n_{max} | n_0 | J | P_f | U_{amax} | U_f | V_{cool} | P_r | $W_{(foot)}$ | $W_{(flange)}$ |
|----------------|-----------------------------------|-------|---|-------|------------|-------|------------|-------|--------------|----------------|
| n_{max} | Max mechanical speed | | | | | | | | | |
| n_0 | Min speed at constant torque | | | | | | | | | |
| J | Moment of inertia | | | | | | | | | |
| P_f | Excitation power | | | | | | | | | |
| U_{amax} | Max rated voltage | | | | | | | | | |
| U_f | Excitation voltage | | | | | | | | | |
| V_{cool} | Cooling air flow | | | | | | | | | |
| P_r | Static pressure drop (IC17, IC37) | | | | | | | | | |
| $W_{(foot)}$ | Weight: foot mounting * | | | | | | | | | |
| $W_{(flange)}$ | Weight: flange mounting * | | | | | | | | | |

*excl. accessories

| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
|-----------|----------------------|-----|-----|----------------------------|-----|-----|-----|------|-----|------|--------|-------------------|---------------|-------------|
| FR 157... | | | | n_b (min ⁻¹) | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) |
| n_b | Base speed | | | | | | | | | | | | | |
| U_a | Armature voltage | | | | | | | | | | | | | |
| P | Mechanical power | | | | | | | | | | | | | |
| I | Armature current | | | | | | | | | | | | | |
| T | Torque | | | | | | | | | | | | | |
| η | Efficiency IEC | | | | | | | | | | | | | |
| n_2 | Max electrical speed | | | | | | | | | | | | | |
| R_A | Armature resistance | | | | | | | | | | | | | |
| L_A | Armature inductance | | | | | | | | | | | | | |

Data subject to change without prior notice.

Technical data

| | n_{max} 5000 min ⁻¹ | n_0 40 min ⁻¹ | J 0.03 kgm ² | P_f 420 W | U_{amax} 620 V | U_f 110-440 V | V_{cool} 235 m ³ /h | Pr 375 Pa | $W_{(foot)}$ 90 kg | $W_{(flange)}$ 102 kg | | | |
|---------------------|-------------------------------------|-------------------------------|------------------------------|----------------|---------------------|--------------------|-------------------------------------|----------------|-----------------------|--------------------------|-------------|------|----|
| Cat. Nr | U_a (V): 260 400 420 440 470 520 | | | | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) | | |
| FR 154... | n_b (min ⁻¹) | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | | |
| 241-AB | 1000 | 1075 | 1145 | 1255 | 1440 | 3.2 | 12.2 | 31.0 | 61.1 | 1605 | 9.84 | 120 | |
| | | | | | | 3.5 | 12.2 | 31.0 | 62.8 | | | | |
| | | | | | | 3.7 | 12.2 | 31.0 | 64.1 | | | | |
| | | | | | | 4.1 | 12.2 | 31.0 | 66.0 | | | | |
| | | | | | | 4.6 | 12.0 | 30.4 | 68.9 | | | | |
| 241-BB | 645 | 1235 | 1315 | 1400 | 1525 | 1745 | 2.0 | 13.5 | 29.1 | 50.3 | 1960 | 7.78 | 88 |
| | | | | | | | 3.8 | 13.5 | 29.3 | 65.0 | | | |
| | | | | | | | 4.0 | 13.5 | 29.3 | 66.2 | | | |
| | | | | | | | 4.3 | 13.5 | 29.3 | 67.5 | | | |
| | | | | | | | 4.7 | 13.5 | 29.3 | 69.2 | | | |
| 241-CB | 860 | 1570 | 1670 | 1770 | 1920 | 2180 | 2.8 | 17.0 | 30.8 | 57.4 | 2480 | 5.14 | 61 |
| | | | | | | | 5.1 | 17.0 | 30.8 | 70.0 | | | |
| | | | | | | | 5.4 | 17.0 | 30.8 | 71.2 | | | |
| | | | | | | | 5.7 | 17.0 | 30.8 | 72.2 | | | |
| | | | | | | | 6.2 | 17.0 | 30.8 | 73.6 | | | |
| 251-CB | 1010 | 1795 | 1905 | 2015 | 2185 | 2475 | 3.2 | 18.5 | 30.2 | 61.1 | 3060 | 4.21 | 49 |
| | | | | | | | 5.7 | 18.5 | 30.2 | 61.1 | | | |
| | | | | | | | 6.0 | 18.5 | 30.2 | 73.5 | | | |
| | | | | | | | 6.4 | 18.5 | 30.2 | 74.5 | | | |
| | | | | | | | 6.9 | 18.5 | 30.2 | 75.7 | | | |
| 241-DB | 1185 | 2070 | 2195 | 2320 | 2510 | 2832 | 7.7 | 18.2 | 29.7 | 77.7 | 3250 | 3.33 | 39 |
| | | | | | | | 3.8 | 21.0 | 30.4 | 64.4 | | | |
| | | | | | | | 6.6 | 21.0 | 30.4 | 74.8 | | | |
| | | | | | | | 7.0 | 21.0 | 30.4 | 75.7 | | | |
| | | | | | | | 7.4 | 21.0 | 30.4 | 76.5 | | | |
| 241-EB* | 1445 | 2450 | 2595 | 2740 | 2955 | 3325 | 8.0 | 21.0 | 30.4 | 77.7 | 3835 | 2.42 | 30 |
| | | | | | | | 8.9 | 20.7 | 29.9 | 79.4 | | | |
| | | | | | | | 4.5 | 23.7 | 30.0 | 69.1 | | | |
| | | | | | | | 7.7 | 23.7 | 30.0 | 77.9 | | | |
| | | | | | | | 8.2 | 23.7 | 30.0 | 78.7 | | | |
| 231-EB | 1740 | 2920 | 3085 | 3255 | 3325 | 3325 | 8.6 | 23.7 | 30.0 | 79.4 | 3595 | 1.75 | 30 |
| | | | | | | | 9.3 | 23.7 | 30.0 | 80.4 | | | |
| | | | | | | | 10.3 | 23.3 | 29.5 | 81.8 | | | |
| | | | | | | | 5.8 | 29.0 | 31.6 | 72.3 | | | |
| | | | | | | | 9.6 | 29.0 | 31.5 | 80.1 | | | |
| 231-FB | 2175 | 3590 | 3790 | 3995 | 3325 | 3325 | 10.2 | 29.0 | 31.5 | 80.8 | 3835 | 1.25 | 15 |
| | | | | | | | 10.7 | 29.0 | 31.5 | 81.4 | | | |
| | | | | | | | 7.0 | 34.0 | 30.8 | 75.7 | | | |
| | | | | | | | 11.5 | 34.0 | 30.7 | 82.3 | | | |
| | | | | | | | 12.2 | 34.0 | 30.7 | 82.9 | | | |
| 231-GB ¹ | 2820 | 4590 | | | | | 12.8 | 34.0 | 30.7 | 83.4 | 5000 | 0.85 | 10 |
| | | | | | | | 8.7 | 41.0 | 29.6 | 79.0 | | | |
| | | | | | | | 14.2 | 41.0 | 29.6 | 84.3 | | | |

¹ Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 5000 min ⁻¹ | n_0 40 min ⁻¹ | J 0.04 kgm ² | P_f 500 W | U_{amax} 620 V | U_f 110-440 V | V_{cool} 235 m ³ /h | Pr 375 Pa | $W_{(foot)}$ 96 kg | $W_{(flange)}$ 108 kg | | | |
|----------------|-------------------------------------|-------------------------------|------------------------------|----------------|---------------------|--------------------|-------------------------------------|----------------|-----------------------|--------------------------|-------------|------|----|
| Cat. Nr | U_a (V): 260 400 420 440 470 520 | | | | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) | | |
| FR 154... | n_b (min ⁻¹) | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | 115°C (Ω) | (mH) | | |
| 141-AB | 655 | 705 | 755 | 830 | 964 | 3.0 | 12.2 | 44.3 | 56.3 | 1055 | 11.51 | 164 | |
| | | | | | | 3.3 | 12.2 | 44.3 | 58.1 | | | | |
| | | | | | | 3.5 | 12.2 | 44.3 | 59.7 | | | | |
| | | | | | | 3.9 | 12.2 | 44.3 | 61.8 | | | | |
| | | | | | | 4.4 | 12.0 | 43.6 | 65.3 | | | | |
| 151-AB | 725 | 780 | 835 | 915 | 1058 | 3.5 | 13.5 | 45.6 | 58.6 | 1280 | 9.85 | 141 | |
| | | | | | | 3.7 | 13.5 | 45.6 | 60.2 | | | | |
| | | | | | | 4.0 | 13.5 | 45.6 | 61.8 | | | | |
| | | | | | | 4.4 | 13.5 | 45.7 | 63.8 | | | | |
| | | | | | | 5.0 | 13.3 | 44.8 | 67.1 | | | | |
| 141-BB | 790 | 850 | 910 | 1000 | 1153 | 3.5 | 13.7 | 42.6 | 59.0 | 1275 | 9.52 | 121 | |
| | | | | | | 3.8 | 13.7 | 42.6 | 60.7 | | | | |
| | | | | | | 4.0 | 13.7 | 42.6 | 62.2 | | | | |
| | | | | | | 4.5 | 13.7 | 42.7 | 64.3 | | | | |
| | | | | | | 5.1 | 13.5 | 41.9 | 67.4 | | | | |
| 141-CB | 1040 | 1110 | 1180 | 1285 | 1472 | 4.8 | 17.0 | 44.0 | 65.5 | 1650 | 6.29 | 83 | |
| | | | | | | 5.1 | 17.0 | 44.0 | 66.8 | | | | |
| | | | | | | 5.4 | 17.0 | 44.0 | 68.1 | | | | |
| | | | | | | 5.9 | 17.0 | 44.1 | 69.8 | | | | |
| | | | | | | 6.7 | 16.7 | 43.3 | 72.5 | | | | |
| 141-DB | 645 | 1200 | 1275 | 1355 | 1470 | 1674 | 2.9 | 18.5 | 42.9 | 54.8 | 1895 | 5.16 | 67 |
| | | | | | | | 5.4 | 18.5 | 43.1 | 68.5 | | | |
| | | | | | | | 5.8 | 18.5 | 43.1 | 69.7 | | | |
| | | | | | | | 6.1 | 18.5 | 43.2 | 70.8 | | | |
| | | | | | | | 6.7 | 18.5 | 43.1 | 72.4 | | | |
| 141-EB | 770 | 1390 | 1480 | 1570 | 1705 | 1933 | 3.5 | 21.0 | 43.4 | 58.7 | 2200 | 4.07 | 54 |
| | | | | | | | 6.3 | 21.0 | 43.5 | 71.2 | | | |
| | | | | | | | 6.7 | 21.0 | 43.5 | 72.3 | | | |
| | | | | | | | 7.1 | 21.0 | 43.5 | 73.4 | | | |
| | | | | | | | 7.8 | 21.0 | 43.6 | 74.8 | | | |
| 141-FB | 950 | 1660 | 1765 | 1865 | 2020 | 2278 | 4.3 | 24.0 | 43.5 | 64.2 | 2610 | 2.97 | 41 |
| | | | | | | | 7.6 | 24.0 | 43.5 | 75.0 | | | |
| | | | | | | | 8.0 | 24.0 | 43.5 | 76.0 | | | |
| | | | | | | | 8.5 | 24.0 | 43.5 | 76.9 | | | |
| | | | | | | | 9.2 | 24.0 | 43.5 | 78.1 | | | |
| 141-GB* | 1165 | 1995 | 2110 | 2230 | 2410 | 2710 | 5.5 | 29.2 | 45.1 | 68.5 | 3120 | 2.13 | 30 |
| | | | | | | | 9.4 | 29.0 | 45.2 | 77.9 | | | |
| | | | | | | | 10.0 | 29.0 | 45.2 | 78.7 | | | |
| | | | | | | | 10.5 | 29.0 | 45.2 | 79.5 | | | |
| | | | | | | | 11.4 | 29.0 | 45.1 | 80.6 | | | |
| 131-CB* | 1305 | 2210 | 2340 | 2470 | 2665 | 2993 | 6.2 | 32.0 | 45.7 | 70.7 | 3120 | 1.76 | 25 |
| | | | | | | | 10.6 | 32.0 | 45.7 | 79.4 | | | |
| | | | | | | | 11.2 | 32.0 | 45.7 | 80.2 | | | |
| | | | | | | | 11.8 | 32.0 | 45.7 | 80.0 | | | |
| | | | | | | | 12.7 | 32.0 | 45.7 | 81.9 | | | |
| 141-HB | 1470 | 2465 | 2610 | 2750 | 2965 | 3326 | 14.1 | 31.5 | 44.9 | 83.3 | 3850 | 1.52 | 21 |
| | | | | | | | 6.8 | 34.0 | 44.0 | 72.6 | | | |
| | | | | | | | 11.4 | 34.0 | 44.0 | 80.7 | | | |
| | | | | | | | 12.0 | 34.0 | 44.0 | 81.4 | | | |
| | | | | | | | 12.7 | 34.0 | 44.0 | 82.0 | | | |
| 141-KB* | 1675 | 2785 | 2940 | 3100 | 3335 | 3326 | 13.7 | 34.0 | 44.1 | 82.9 | 4340 | 1.22 | 17 |
| | | | | | | | 15.1 | 33.4 | 43.3 | 84.2 | | | |
| | | | | | | | 7.8 | 38.0 | 44.3 | 75.0 | | | |
| | | | | | | | 12.9 | 38.0 | 44.3 | 82.3 | | | |
| | | | | | | | 13.6 | 38.0 | 44.3 | 82.9 | | | |
| | | | | | | | 14.4 | 38.0 | 44.3 | 83.5 | | | |
| | | | | | | | 15.5 | 38.0 | 44.3 | 84.3 | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 5000 min ⁻¹ | n_0 40 min ⁻¹ | J 0.037 kgm ² | P_f 625 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 270 m ³ /h | Pr 480 Pa | $W_{(foot)}$ 103 kg | $W_{(flange)}$ 115 kg | | | |
|---------------|-------------------------------------|-------------------------------|-------------------------------|----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------|-------|-------|
| Cat. Nr | U_a (V): 260 400 420 440 470 520 | | | | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) | | |
| FR 153... | n_b (min ⁻¹) | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | 115°C (Ω) | (mH) | | |
| 201-NA | 1325 | 1405 | 1485 | 1605 | 1810 | 6.7 | 21.0 | 47.9 | 75.1 | 1655 | 3.258 | 40.75 | |
| | | | | | | 7.1 | 21.0 | 47.9 | 76.0 | 1655 | | | |
| | | | | | | 7.5 | 21.0 | 47.9 | 76.9 | 1655 | | | |
| | | | | | | 8.1 | 21.0 | 47.9 | 78.0 | 1655 | | | |
| | | | | | | 8.3 | 19.2 | 43.8 | 80.1 | 1810 | | | |
| 201-MA | 1445 | 1530 | 1615 | 1745 | 1960 | 7.1 | 22.0 | 47.1 | 76.8 | 1795 | 2.776 | 35.80 | |
| | | | | | | 7.5 | 22.0 | 47.1 | 77.7 | 1795 | | | |
| | | | | | | 8.6 | 22.0 | 47.0 | 78.5 | 1795 | | | |
| | | | | | | 8.6 | 22.0 | 47.0 | 79.5 | 1795 | | | |
| | | | | | | 8.8 | 20.1 | 43.1 | 81.3 | 1960 | | | |
| 201-LA | 920 | 1565 | 1655 | 1745 | 1890 | 2115 | 4.6 | 24.0 | 48.0 | 68.9 | 1890 | 2.416 | 31.20 |
| | | | | | | | 7.8 | 24.0 | 47.9 | 77.9 | 1890 | | |
| | | | | | | | 8.3 | 24.0 | 47.9 | 78.7 | 1890 | | |
| | | | | | | | 8.8 | 24.0 | 47.9 | 79.5 | 1890 | | |
| | | | | | | | 9.4 | 24.0 | 47.9 | 80.4 | 1890 | | |
| 201-KA | 1010 | 1700 | 1800 | 1900 | 2050 | 2295 | 4.9 | 25.0 | 46.3 | 70.2 | 2105 | 2.174 | 26.90 |
| | | | | | | | 8.2 | 25.0 | 46.3 | 78.8 | 2105 | | |
| | | | | | | | 8.7 | 25.0 | 46.3 | 79.5 | 2105 | | |
| | | | | | | | 9.2 | 25.0 | 46.3 | 80.2 | 2105 | | |
| | | | | | | | 9.9 | 25.0 | 46.3 | 81.2 | 2105 | | |
| 201-JA | 1120 | 1870 | 1980 | 2085 | 2245 | 2515 | 10.2 | 22.9 | 42.4 | 82.5 | 2295 | 1.783 | 22.90 |
| | | | | | | | 5.5 | 27.5 | 47.0 | 72.5 | 2435 | | |
| | | | | | | | 9.2 | 27.5 | 47.0 | 80.3 | 2435 | | |
| | | | | | | | 9.7 | 27.5 | 47.0 | 81.0 | 2435 | | |
| | | | | | | | 10.3 | 27.5 | 47.0 | 81.7 | 2435 | | |
| 201-IA | 1240 | 2060 | 2175 | 2295 | 2470 | 2760 | 11.1 | 27.5 | 47.0 | 82.5 | 2435 | 1.549 | 19.25 |
| | | | | | | | 12.0 | 26.6 | 45.5 | 83.7 | 2515 | | |
| | | | | | | | 6.1 | 30.0 | 46.7 | 73.8 | 2655 | | |
| | | | | | | | 10.1 | 30.0 | 46.6 | 81.2 | 2655 | | |
| | | | | | | | 10.6 | 30.0 | 46.6 | 81.9 | 2655 | | |
| 201-HA | 1390 | 2295 | 2420 | 2550 | 2745 | 3065 | 11.2 | 30.0 | 46.6 | 82.5 | 2655 | 1.275 | 15.90 |
| | | | | | | | 11.8 | 33.0 | 46.6 | 83.1 | 2920 | | |
| | | | | | | | 12.4 | 33.0 | 46.6 | 83.6 | 2920 | | |
| | | | | | | | 13.4 | 33.0 | 46.6 | 84.4 | 2920 | | |
| | | | | | | | 14.2 | 31.4 | 44.3 | 85.4 | 3065 | | |
| 201-GA | 1575 | 2575 | 2720 | 2860 | 3080 | 3500 | 8.2 | 39.0 | 50.0 | 77.9 | 2975 | 0.973 | 12.90 |
| | | | | | | | 13.5 | 39.0 | 49.9 | 84.0 | 2975 | | |
| | | | | | | | 14.2 | 39.0 | 49.9 | 84.6 | 2975 | | |
| | | | | | | | 14.9 | 39.0 | 49.9 | 85.0 | 2975 | | |
| | | | | | | | 15.5 | 37.7 | 48.2 | 85.7 | 3080 | | |
| 201-FA | 1800 | 2930 | 3090 | 3250 | 3500 | 3500 | 9.4 | 44.0 | 49.9 | 79.7 | 3425 | 0.772 | 10.20 |
| | | | | | | | 15.3 | 44.0 | 49.8 | 85.2 | 3425 | | |
| | | | | | | | 16.1 | 44.0 | 49.8 | 85.7 | 3425 | | |
| | | | | | | | 17.0 | 44.0 | 49.8 | 86.1 | 3425 | | |
| | | | | | | | 17.8 | 43.0 | 48.7 | 86.7 | 3500 | | |
| 201-EA | 2100 | 3390 | 3575 | 3760 | 3500 | 3500 | 11.2 | 51.0 | 51.0 | 81.8 | 3855 | 0.573 | 7.80 |
| | | | | | | | 18.0 | 51.0 | 50.8 | 86.6 | 3855 | | |
| | | | | | | | 19.0 | 51.0 | 50.8 | 87.0 | 3855 | | |
| | | | | | | | 20.0 | 51.0 | 50.8 | 87.3 | 3855 | | |
| | | | | | | | 13.4 | 60.0 | 51.3 | 83.5 | 4460 | | |
| 201-DA | 2495 | 4000 | | | | | 21.4 | 60.0 | 51.1 | 87.7 | 4460 | 0.425 | 5.75 |
| | | | | | | | 15.9 | 70.0 | 49.8 | 85.4 | 5000 | | |
| 201-CA | 3055 | | | | | | | | | | 0.298 | 4.00 | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| Cat. Nr | n_{max} | n_0 | J | P_f | U_{amax} | U_f | V_{cool} | Pr | $W_{(foot)}$ | $W_{(flange)}$ | | | |
|-----------|------------------------|----------------------------|-----------------------|-------|------------|-----------|-----------------------|--------|--------------|----------------|-------------------|--------------------|-------------|
| | 5000 min ⁻¹ | 40 min ⁻¹ | 0.05 kgm ² | 740 W | 550 V | 110-440 V | 270 m ³ /h | 480 Pa | 110 kg | 122 kg | | | |
| FR 153... | U_a (V):260 | 400 | 420 | 440 | 470 | 520 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | 115°C (Ω) | (mH) |
| 101-KA | | 1160 | | | | | 7.9 | 25.0 | 65.2 | 75.0 | 1545 | 2.679 | 32.75 |
| | | | 1230 | | | | 8.4 | 25.0 | 65.2 | 76.0 | 1545 | | |
| | | | | 1300 | | | 8.9 | 25.0 | 65.2 | 76.8 | 1545 | | |
| | | | | | 1405 | | 9.6 | 25.0 | 65.2 | 77.9 | 1545 | | |
| 101-JA | | 1280 | | | | | 8.9 | 27.5 | 66.2 | 76.9 | 1790 | 2.196 | 27.90 |
| | | | 1355 | | | | 9.4 | 27.5 | 66.2 | 77.8 | 1790 | | |
| | | | | 1435 | | | 9.9 | 27.5 | 66.2 | 78.5 | 1790 | | |
| | | | | | 1545 | | 10.7 | 27.5 | 66.2 | 79.6 | 1790 | | |
| 101-IA* | | 1410 | | | | | 12.0 | 27.5 | 66.2 | 81.0 | 1790 | 1.908 | 23.45 |
| | | | 1495 | | | | 9.8 | 30.0 | 66.2 | 77.9 | 1950 | | |
| | | | | 1575 | | | 10.4 | 30.0 | 66.2 | 78.7 | 1950 | | |
| | | | | | 1700 | | 10.9 | 30.0 | 66.1 | 79.5 | 1950 | | |
| 101-HA | | 1575 | | | | | 11.8 | 30.0 | 66.1 | 80.4 | 1950 | 1.569 | 19.40 |
| | | | 1670 | | | | 13.2 | 30.0 | 66.1 | 81.8 | 1950 | | |
| | | | | 1760 | | | 10.9 | 33.0 | 66.2 | 79.5 | 2145 | | |
| | | | | | 1895 | | 11.6 | 33.0 | 66.2 | 80.2 | 2145 | | |
| 101-GA | 1070 | | | | | | 12.2 | 33.0 | 66.1 | 80.9 | 2145 | 1.195 | 15.70 |
| | | | 1790 | | | | 13.1 | 39.0 | 70.5 | 81.3 | 2240 | | |
| | | | | 1880 | | | 13.9 | 39.0 | 70.5 | 82.0 | 2240 | | |
| | | | | | 1980 | | 14.6 | 39.0 | 70.5 | 82.6 | 2240 | | |
| 101-FA* | 1230 | | | | | | 15.7 | 39.0 | 70.4 | 83.3 | 2240 | 0.947 | 12.40 |
| | | | 2030 | | | | 9.1 | 44.0 | 70.8 | 76.2 | 2515 | | |
| | | | | 2145 | | | 15.0 | 44.0 | 70.6 | 82.8 | 2515 | | |
| | | | | | 2255 | | 15.8 | 44.0 | 70.6 | 83.3 | 2515 | | |
| 101-EA* | 1445 | | | | | | 16.7 | 44.0 | 70.6 | 83.9 | 2515 | 0.708 | 9.50 |
| | | | 2355 | | | | 17.9 | 44.0 | 70.6 | 84.6 | 2515 | | |
| | | | | 2485 | | | 10.9 | 51.0 | 71.8 | 78.7 | 2835 | | |
| | | | | | 2615 | | 17.7 | 51.0 | 71.6 | 84.4 | 2835 | | |
| 101-DA* | 1720 | | | | | | 18.6 | 51.0 | 71.6 | 84.9 | 2835 | 0.526 | 7.00 |
| | | | 2785 | | | | 19.6 | 51.0 | 71.6 | 85.3 | 2835 | | |
| | | | | 2935 | | | 13.0 | 60.0 | 72.2 | 80.7 | 3280 | | |
| | | | | | 3085 | | 21.0 | 60.0 | 72.0 | 85.7 | 3280 | | |
| 101-CA | 2115 | | | | | | 22.1 | 60.0 | 72.0 | 86.2 | 3280 | 0.368 | 4.85 |
| | | | 3390 | | | | 23.3 | 60.0 | 72.0 | 87.0 | 3280 | | |
| | | | | 3575 | | | 15.5 | 70.0 | 70.2 | 83.0 | 4050 | | |
| | | | | | 3755 | | 24.8 | 70.0 | 69.9 | 87.1 | 4050 | | |
| 101-BA | 2705 | | | | | | 26.1 | 70.0 | 69.9 | 87.5 | 4050 | 0.251 | 3.10 |
| | | | 4300 | | | | 27.5 | 70.0 | 69.8 | 87.8 | 4050 | | |
| | | | | 4525 | | | 18.6 | 82.0 | 65.5 | 84.9 | 5000 | | |
| | | | | | 4755 | | 29.3 | 82.0 | 65.2 | 88.1 | 5000 | | |
| 101-AA | 3690 | | | | | | 30.9 | 82.0 | 65.1 | 88.4 | 5000 | 0.149 | 1.75 |
| | | | | | | | 32.4 | 82.0 | 65.1 | 88.6 | 5000 | | |
| | | | | | | | 23.0 | 100.0 | 59.5 | 86.7 | 5000 | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| Cat. Nr | n_{max} | n_0 | J | P_f | U_{amax} | U_f | V_{cool} | Pr | $W_{(foot)}$ | $W_{(flange)}$ | | | |
|-----------|------------------------|----------------------------|-----------------------|-------|------------|-----------|-----------------------|--------|--------------|----------------|-------------------|--------------------|-------------|
| | 5000 min ⁻¹ | 40 min ⁻¹ | 0.09 kgm ² | 550 W | 620 V | 110-440 V | 435 m ³ /h | 400 Pa | 132 kg | 147 kg | | | |
| FR 154... | U_a (V):260 | 400 | 420 | 440 | 470 | 520 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | 115°C (Ω) | (mH) |
| 241-AB | | 605 | 650 | 700 | 770 | 898 | 4.0 | 16.4 | 63.1 | 56.1 | 1460 | 8.93 | 132 |
| | | | | | | | 4.3 | 16.4 | 63.1 | 57.9 | 1480 | | |
| | | | | | | | 4.6 | 16.4 | 63.1 | 59.5 | 1480 | | |
| | | | | | | | 5.1 | 16.4 | 63.4 | 61.7 | 1480 | | |
| | | | | | | | 5.8 | 16.1 | 62.1 | 65.2 | 1480 | | |
| 241-BB | | 830 | 885 | 945 | 1035 | 1186 | 5.6 | 20.5 | 64.3 | 63.7 | 1725 | 5.73 | 87 |
| | | | | | | | 6.0 | 20.5 | 64.3 | 65.1 | 1725 | | |
| | | | | | | | 6.4 | 20.5 | 64.3 | 66.5 | 1725 | | |
| | | | | | | | 7.0 | 20.5 | 64.3 | 68.3 | 1725 | | |
| | | | | | | | 7.9 | 20.2 | 63.3 | 71.2 | 1725 | | |
| 241-CB | | 980 | 1045 | 1110 | 1210 | 1383 | 6.6 | 23.3 | 64.6 | 67.0 | 1950 | 4.50 | 68 |
| | | | | | | | 7.1 | 23.3 | 64.6 | 68.3 | 1950 | | |
| | | | | | | | 7.5 | 23.3 | 64.6 | 69.5 | 1950 | | |
| | | | | | | | 8.2 | 23.3 | 64.6 | 71.2 | 1950 | | |
| | | | | | | | 9.2 | 22.9 | 63.5 | 73.8 | 1950 | | |
| 241-DB | | 1200 | 1275 | 1350 | 1465 | 1664 | 8.3 | 27.5 | 66.1 | 71.7 | 2200 | 3.18 | 51 |
| | | | | | | | 8.8 | 27.5 | 66.1 | 72.8 | 2200 | | |
| | | | | | | | 9.3 | 27.5 | 66.1 | 73.9 | 2200 | | |
| | | | | | | | 10.1 | 27.5 | 66.1 | 75.3 | 2200 | | |
| | | | | | | | 11.3 | 27.0 | 65.0 | 77.5 | 2200 | | |
| 231-AB | 745 | 1330 | 1415 | 1495 | 1620 | 1835 | 5.3 | 30.5 | 67.6 | 62.2 | 1860 | 2.60 | 43 |
| | | | | | | | 9.4 | 30.5 | 67.7 | 73.8 | 1860 | | |
| | | | | | | | 10.0 | 30.5 | 67.7 | 74.9 | 1860 | | |
| | | | | | | | 10.6 | 30.5 | 67.7 | 75.8 | 1860 | | |
| | | | | | | | 11.5 | 30.5 | 67.7 | 77.1 | 1860 | | |
| 251-EB | 830 | 1465 | 1555 | 1650 | 1785 | 2019 | 5.6 | 32.0 | 64.9 | 63.6 | 2650 | 2.37 | 36 |
| | | | | | | | 10.0 | 32.0 | 65.0 | 74.8 | 2650 | | |
| | | | | | | | 10.6 | 32.0 | 65.0 | 75.8 | 2650 | | |
| | | | | | | | 11.2 | 32.0 | 65.0 | 76.7 | 2650 | | |
| | | | | | | | 12.2 | 32.0 | 65.1 | 77.9 | 2650 | | |
| 241-EB | 945 | 1650 | 1750 | 1850 | 2000 | 2257 | 6.6 | 36.0 | 66.5 | 66.5 | 2840 | 1.93 | 30 |
| | | | | | | | 11.5 | 36.0 | 66.4 | 76.7 | 2840 | | |
| | | | | | | | 12.2 | 36.0 | 66.4 | 77.7 | 2840 | | |
| | | | | | | | 12.9 | 36.0 | 66.4 | 78.5 | 2840 | | |
| | | | | | | | 13.9 | 36.0 | 66.4 | 79.6 | 2840 | | |
| 251-FB | 1100 | 1880 | 1990 | 2105 | 2270 | 2554 | 7.7 | 40.0 | 66.5 | 70.1 | 3160 | 1.51 | 24 |
| | | | | | | | 13.1 | 40.0 | 66.5 | 79.1 | 3160 | | |
| | | | | | | | 13.9 | 40.0 | 66.5 | 79.9 | 3160 | | |
| | | | | | | | 14.6 | 40.0 | 66.5 | 80.7 | 3160 | | |
| | | | | | | | 15.8 | 40.0 | 66.5 | 81.7 | 3160 | | |
| 241-FB | 1280 | 2155 | 2280 | 2405 | 2595 | 2911 | 9.1 | 46.0 | 68.0 | 73.0 | 3480 | 1.16 | 19 |
| | | | | | | | 15.4 | 46.0 | 68.1 | 81.1 | 3480 | | |
| | | | | | | | 16.3 | 46.0 | 68.1 | 81.8 | 3480 | | |
| | | | | | | | 17.1 | 46.0 | 68.1 | 82.5 | 3480 | | |
| | | | | | | | 18.5 | 46.0 | 68.1 | 83.3 | 3480 | | |
| 241-GB | 1505 | 2500 | 2645 | 2790 | 3000 | | 10.6 | 52.0 | 67.3 | 75.4 | 4000 | 0.92 | 15 |
| | | | | | | | 17.6 | 52.0 | 67.3 | 82.7 | 4000 | | |
| | | | | | | | 18.7 | 52.0 | 67.3 | 83.3 | 4000 | | |
| | | | | | | | 19.7 | 52.0 | 67.3 | 83.9 | 4000 | | |
| | | | | | | | 21.2 | 52.0 | 67.4 | 84.7 | 4000 | | |
| 231-DB | 1820 | 2990 | 3155 | 3320 | | | 12.7 | 60.0 | 66.9 | 78.7 | 4000 | 0.65 | 11 |
| | | | | | | | 20.8 | 60.0 | 66.6 | 84.9 | 4000 | | |
| | | | | | | | 22.0 | 60.0 | 66.6 | 85.4 | 4000 | | |
| 231-EB | 2240 | 3640 | | | | | 23.2 | 60.0 | 66.6 | 85.9 | 4000 | 0.47 | 8 |
| | | | | | | | 15.6 | 72.0 | 66.5 | 81.0 | 4000 | | |
| | | | | | | | 25.3 | 72.0 | 66.5 | 86.3 | 4000 | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Data subject to change without prior notice.

Technical data

| | n_{max} 4000 min ⁻¹ | n_0 40 min ⁻¹ | J 0.10 kgm ² | P_f 750 W | U_{amax} 620 V | U_f 110-440 V | V_{cool} 470 m ³ /h | Pr 550 Pa | $W_{(foot)}$ 115 kg | $W_{(flange)}$ 130 kg | | | |
|----------------|-------------------------------------|-------------------------------|------------------------------|----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------|-------|-------|
| Cat. Nr | U_a (V): 260 400 420 440 470 520 | | | | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) | | |
| FR 156... | n_b (min ⁻¹) | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | 115°C (Ω) | (mH) | | |
| 341-AB | 690 | 737 | 785 | 855 | 980 | 7.7 | 27.5 | 107.0 | 65.6 | 1250 | 4.01 | 60.30 | |
| | | | | | | 8.2 | 27.5 | 107.0 | 67.0 | 1250 | | | |
| | | | | | | 8.8 | 27.5 | 107.0 | 68.3 | 1250 | | | |
| | | | | | | 9.6 | 27.5 | 107.0 | 70.0 | 1250 | | | |
| | | | | | | 10.8 | 27.0 | 105.0 | 72.8 | 1250 | | | |
| 341-BB | 820 | 875 | 930 | 1015 | 1155 | 9.1 | 31.0 | 106.0 | 69.0 | 1410 | 3.16 | 46.20 | |
| | | | | | | 9.7 | 31.0 | 106.0 | 70.3 | 1410 | | | |
| | | | | | | 10.3 | 31.0 | 106.0 | 71.4 | 1410 | | | |
| | | | | | | 11.2 | 31.0 | 105.0 | 73.0 | 1410 | | | |
| | | | | | | 12.5 | 30.5 | 104.0 | 75.5 | 1410 | | | |
| 341-CB | 555 | 1000 | 1065 | 1130 | 1225 | 1390 | 5.9 | 35.0 | 102.0 | 60.1 | 1750 | 2.41 | 33.90 |
| | | | | | | | 10.7 | 35.0 | 102.0 | 72.5 | 1750 | | |
| | | | | | | | 11.4 | 35.0 | 102.0 | 73.6 | 1750 | | |
| | | | | | | | 12.1 | 35.0 | 102.0 | 74.7 | 1750 | | |
| | | | | | | | 13.1 | 35.0 | 102.0 | 76.0 | 1750 | | |
| 341-DB | 720 | 1260 | 1335 | 1410 | 1525 | 1720 | 7.9 | 43.0 | 105.0 | 66.2 | 2000 | 1.61 | 23.60 |
| | | | | | | | 13.8 | 43.0 | 105.0 | 76.7 | 2000 | | |
| | | | | | | | 14.6 | 43.0 | 105.0 | 77.6 | 2000 | | |
| | | | | | | | 15.4 | 43.0 | 105.0 | 78.5 | 2000 | | |
| | | | | | | | 16.7 | 43.0 | 105.0 | 79.6 | 2000 | | |
| 341-EB* | 835 | 1430 | 1515 | 1600 | 1730 | 1945 | 9.4 | 49.0 | 107.0 | 69.5 | 2160 | 1.26 | 19.40 |
| | | | | | | | 16.0 | 49.0 | 107.0 | 78.9 | 2160 | | |
| | | | | | | | 17.0 | 49.0 | 107.0 | 79.7 | 2160 | | |
| | | | | | | | 18.0 | 49.0 | 107.0 | 80.5 | 2160 | | |
| | | | | | | | 19.4 | 49.0 | 107.0 | 81.5 | 2160 | | |
| 341-FB | 980 | 1650 | 1745 | 1840 | 1985 | 2230 | 10.2 | 51.0 | 99.0 | 72.6 | 2630 | 1.04 | 15.30 |
| | | | | | | | 17.1 | 51.0 | 99.1 | 80.9 | 2630 | | |
| | | | | | | | 18.1 | 51.0 | 99.1 | 81.7 | 2630 | | |
| | | | | | | | 19.1 | 51.0 | 99.1 | 82.3 | 2630 | | |
| | | | | | | | 20.6 | 51.0 | 99.0 | 83.2 | 2630 | | |
| 341-GB* | 1150 | 1915 | 2025 | 2135 | 2300 | 2580 | 12.7 | 62.0 | 106.0 | 75.4 | 2920 | 0.77 | 11.80 |
| | | | | | | | 21.2 | 62.0 | 105.0 | 82.8 | 2920 | | |
| | | | | | | | 22.4 | 62.0 | 105.0 | 83.5 | 2920 | | |
| | | | | | | | 23.6 | 62.0 | 105.0 | 84.1 | 2920 | | |
| | | | | | | | 25.4 | 62.0 | 105.0 | 84.9 | 2920 | | |
| 341-HB | 1380 | 2270 | 2395 | 2525 | 2720 | 3040 | 14.5 | 69.0 | 100.0 | 77.6 | 3750 | 0.61 | 8.70 |
| | | | | | | | 23.9 | 69.0 | 101.0 | 84.3 | 3750 | | |
| | | | | | | | 25.2 | 69.0 | 101.0 | 84.8 | 3750 | | |
| | | | | | | | 26.6 | 69.0 | 100.0 | 85.4 | 3750 | | |
| | | | | | | | 28.6 | 69.0 | 100.0 | 86.1 | 3750 | | |
| 341-KB | 1725 | 2795 | 2945 | 3100 | 3335 | 3715 | 16.2 | 74.0 | 89.7 | 81.1 | 4000 | 0.45 | 5.03 |
| | | | | | | | 26.2 | 74.0 | 89.6 | 86.4 | 4000 | | |
| | | | | | | | 27.6 | 74.0 | 89.6 | 86.9 | 4000 | | |
| | | | | | | | 29.1 | 74.0 | 89.4 | 87.3 | 4000 | | |
| | | | | | | | 31.2 | 74.0 | 89.4 | 87.8 | 4000 | | |
| 331-GB | 2220 | 3560 | 3750 | 3945 | | | 22.6 | 100.0 | 97.0 | 84.3 | 4000 | 0.26 | 3.20 |
| | | | | | | | 36.1 | 100.0 | 96.8 | 88.5 | 4000 | | |
| | | | | | | | 38.0 | 100.0 | 96.8 | 88.9 | 4000 | | |
| | | | | | | | 39.9 | 100.0 | 96.7 | 89.3 | 4000 | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 4000 min ⁻¹ | n_0 40 min ⁻¹ | J 0.12 kgm ² | P_f 830 W | U_{amax} 620 V | U_f 110-440 V | V_{cool} 470 m ³ /h | Pr 550 Pa | $W_{(foot)}$ 145 kg | $W_{(flange)}$ 160 kg | | | | |
|----------------|-------------------------------------|-------------------------------|------------------------------|----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 260 | 400 | 420 | 440 | 470 | 520 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 156... | n_b (min ⁻¹) | | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 241-AB | 730 | | | | | | | 10.2 | 35.0 | 133.0 | 68.8 | 1200 | 2.81 | 42.0 |
| | | | | | | | | 10.9 | 35.0 | 133.0 | 70.1 | 1200 | | |
| | | | | | | | | 11.6 | 35.0 | 133.0 | 71.3 | 1200 | | |
| | | | | | | | | 12.6 | 35.0 | 133.0 | 72.8 | 1200 | | |
| | | | | | | | | 14.1 | 34.4 | 131.0 | 75.4 | 1200 | | |
| 241-BB | 515 | 930 | | | | | | 7.4 | 43.0 | 137.0 | 61.6 | 1410 | 1.88 | 29.2 |
| | | | | | | | | 13.3 | 43.0 | 137.0 | 73.6 | 1410 | | |
| | | | | | | | | 14.1 | 43.0 | 137.0 | 74.7 | 1410 | | |
| | | | | | | | | 15.0 | 43.0 | 137.0 | 75.7 | 1410 | | |
| | | | | | | | | 16.2 | 43.0 | 137.0 | 77.0 | 1410 | | |
| 241-CB | 605 | 1060 | | | | | | 8.9 | 49.0 | 140.0 | 65.6 | 1520 | 1.46 | 23.6 |
| | | | | | | | | 15.6 | 49.0 | 140.0 | 76.2 | 1520 | | |
| | | | | | | | | 16.5 | 49.0 | 140.0 | 77.2 | 1520 | | |
| | | | | | | | | 17.5 | 49.0 | 140.0 | 78.1 | 1520 | | |
| | | | | | | | | 18.9 | 49.0 | 140.0 | 79.2 | 1520 | | |
| 241-DB | 715 | 1230 | | | | | | 9.7 | 51.0 | 130.0 | 69.0 | 1860 | 1.22 | 18.7 |
| | | | | | | | | 16.7 | 51.0 | 130.0 | 78.5 | 1860 | | |
| | | | | | | | | 17.7 | 51.0 | 130.0 | 79.3 | 1860 | | |
| | | | | | | | | 18.6 | 51.0 | 130.0 | 80.1 | 1860 | | |
| | | | | | | | | 20.1 | 51.0 | 130.0 | 81.1 | 1860 | | |
| 241-EB | 845 | 1430 | | | | | | 12.2 | 62.0 | 138.0 | 72.2 | 2050 | 0.89 | 14.2 |
| | | | | | | | | 20.7 | 62.0 | 138.0 | 80.7 | 2050 | | |
| | | | | | | | | 21.9 | 62.0 | 138.0 | 81.5 | 2050 | | |
| | | | | | | | | 23.1 | 62.0 | 138.0 | 82.2 | 2050 | | |
| | | | | | | | | 24.9 | 62.0 | 138.0 | 83.1 | 2050 | | |
| 241-FB* | 1015 | 1700 | | | | | | 27.5 | 61.0 | 136.0 | 84.5 | 2050 | 0.71 | 10.5 |
| | | | | | | | | 14.0 | 69.0 | 132.0 | 74.8 | 2500 | | |
| | | | | | | | | 23.4 | 69.0 | 132.0 | 82.4 | 2500 | | |
| | | | | | | | | 24.8 | 69.0 | 132.0 | 83.1 | 2500 | | |
| | | | | | | | | 26.1 | 69.0 | 132.0 | 83.7 | 2500 | | |
| 241-GB | 1285 | 2100 | | | | | | 28.1 | 69.0 | 132.0 | 84.5 | 2500 | 0.52 | 7.3 |
| | | | | | | | | 31.0 | 67.9 | 129.0 | 85.8 | 2500 | | |
| | | | | | | | | 15.8 | 74.0 | 118.0 | 78.8 | 3350 | | |
| | | | | | | | | 25.8 | 74.0 | 118.0 | 84.9 | 3350 | | |
| | | | | | | | | 27.3 | 74.0 | 117.0 | 85.5 | 3350 | | |
| 241-HB* | 1665 | 2690 | | | | | | 28.7 | 74.0 | 117.0 | 86.0 | 3350 | 0.03 | 4.6 |
| | | | | | | | | 30.8 | 74.0 | 117.0 | 86.6 | 3350 | | |
| | | | | | | | | 33.9 | 72.8 | 115.0 | 87.6 | 3350 | | |
| | | | | | | | | 22.1 | 100.0 | 127.0 | 82.5 | 3900 | | |
| | | | | | | | | 35.7 | 100.0 | 127.0 | 87.4 | 3900 | | |
| 231-HB | 2280 | 3645 | | | | | | 37.6 | 100.0 | 127.0 | 87.8 | 3900 | 0.19 | 2.6 |
| | | | | | | | | 39.6 | 100.0 | 127.0 | 88.2 | 3900 | | |
| | | | | | | | | 42.5 | 100.0 | 127.0 | 88.7 | 3900 | | |
| | | | | | | | | 46.5 | 98.3 | 125.0 | 89.5 | 3900 | | |
| | | | | | | | | 27.7 | 122.0 | 116.0 | 85.1 | 4000 | | |
| | | | | | | | | 44.1 | 122.0 | 116.0 | 88.9 | 4000 | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 4000 min ⁻¹ | n_0 40 min ⁻¹ | J 0.14 kgm ² | P_f 1000 W | U_{amax} 620 V | U_f 110-440 V | V_{cool} 470 m ³ /h | Pr 550 Pa | $W_{(foot)}$ 170 kg | $W_{(flange)}$ 185 kg | | | | |
|----------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 260 | 400 | 420 | 440 | 470 | 520 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 156... | n_b (min ⁻¹) | | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 141-AB | 765 | | | | | | | 11.8 | 38.5 | 148.0 | 72.0 | 1460 | 2.14 | 35.00 |
| | | | | | | | | 12.6 | 38.5 | 148.0 | 73.1 | 1460 | | |
| | | | | | | | | 13.3 | 38.5 | 148.0 | 74.2 | 1460 | | |
| | | | | | | | | 14.4 | 38.5 | 148.0 | 75.5 | 1460 | | |
| | | | | | | | | 16.1 | 37.9 | 145.0 | 77.7 | 1460 | | |
| 141-BB | 495 | 875 | | | | | | 7.7 | 43.0 | 149.0 | 63.5 | 1610 | 1.69 | 29.00 |
| | | | | | | | | 13.6 | 43.0 | 149.0 | 74.7 | 1610 | | |
| | | | | | | | | 14.4 | 43.0 | 149.0 | 75.7 | 1610 | | |
| | | | | | | | | 15.3 | 43.0 | 149.0 | 76.7 | 1610 | | |
| | | | | | | | | 16.5 | 43.0 | 149.0 | 77.9 | 1610 | | |
| 141-CB | 580 | 1000 | | | | | | 9.0 | 48.0 | 148.0 | 66.8 | 1830 | 1.35 | 23.00 |
| | | | | | | | | 15.5 | 48.0 | 148.0 | 76.9 | 1830 | | |
| | | | | | | | | 16.5 | 48.0 | 148.0 | 77.9 | 1830 | | |
| | | | | | | | | 17.4 | 48.0 | 148.0 | 78.7 | 1830 | | |
| | | | | | | | | 18.8 | 48.0 | 148.0 | 79.8 | 1830 | | |
| 141-DB | 690 | 1170 | | | | | | 10.7 | 55.0 | 148.0 | 70.0 | 2080 | 1.05 | 17.00 |
| | | | | | | | | 18.2 | 55.0 | 148.0 | 79.1 | 2080 | | |
| | | | | | | | | 19.3 | 55.0 | 148.0 | 79.9 | 2080 | | |
| | | | | | | | | 20.3 | 55.0 | 148.0 | 80.7 | 2080 | | |
| | | | | | | | | 21.9 | 55.0 | 148.0 | 81.7 | 2080 | | |
| 141-EB* | 825 | 1390 | | | | | | 24.2 | 54.1 | 146.0 | 83.2 | 2080 | 0.08 | 13.00 |
| | | | | | | | | 13.0 | 65.0 | 150.0 | 72.7 | 2470 | | |
| | | | | | | | | 21.9 | 65.0 | 150.0 | 81.0 | 2470 | | |
| | | | | | | | | 23.1 | 65.0 | 150.0 | 81.7 | 2470 | | |
| | | | | | | | | 24.4 | 65.0 | 150.0 | 82.4 | 2470 | | |
| 141-FB* | 1045 | 1720 | | | | | | 26.3 | 65.0 | 150.0 | 83.3 | 2470 | 0.53 | 90.00 |
| | | | | | | | | 29.0 | 63.9 | 148.0 | 84.7 | 2470 | | |
| | | | | | | | | 16.2 | 77.0 | 148.0 | 77.3 | 3000 | | |
| | | | | | | | | 26.7 | 77.0 | 148.0 | 84.0 | 3000 | | |
| | | | | | | | | 28.2 | 77.0 | 148.0 | 84.6 | 3000 | | |
| 141-GB* | 1365 | 2215 | | | | | | 29.7 | 77.0 | 148.0 | 85.1 | 3000 | 0.32 | 60.00 |
| | | | | | | | | 31.9 | 77.0 | 148.0 | 85.8 | 3000 | | |
| | | | | | | | | 35.1 | 75.7 | 145.0 | 86.9 | 3000 | | |
| | | | | | | | | 21.6 | 98.0 | 151.0 | 81.5 | 3780 | | |
| | | | | | | | | 34.9 | 98.0 | 151.0 | 86.8 | 3780 | | |
| 141-HB | 1880 | 3010 | | | | | | 36.8 | 98.0 | 151.0 | 87.3 | 3780 | 0.21 | 3.00 |
| | | | | | | | | 38.7 | 98.0 | 151.0 | 87.7 | 3780 | | |
| | | | | | | | | 41.5 | 98.0 | 151.0 | 88.2 | 3780 | | |
| | | | | | | | | 45.5 | 96.4 | 148.0 | 89.1 | 3780 | | |
| | | | | | | | | 25.7 | 114.0 | 131.0 | 84.3 | 4000 | | |
| | | 3170 | | | | | | 41.0 | 114.0 | 130.0 | 88.4 | 4000 | 0.21 | 3.00 |
| | | | | | | | | 43.2 | 114.0 | 130.0 | 88.7 | 4000 | | |
| | | | | | | | | 45.4 | 114.0 | 130.0 | 89.1 | 4000 | | |
| | | | | | | | | 48.6 | 114.0 | 130.0 | 89.4 | 4000 | | |
| | | | | | | | | 53.2 | 112.0 | 128.0 | 90.1 | 4000 | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 5000 min ⁻¹ | n_0 40 min ⁻¹ | J 0.20 kgm ² | P_f 1350 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 510 m ³ /h | Pr 810 Pa | $W_{(foot)}$ 220 kg | $W_{(flange)}$ 235 kg | | | |
|---------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------|------|------|
| Cat. Nr | U_a (V): 260 400 420 440 470 520 | | | | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) | | |
| FR 156... | n_b (min ⁻¹) | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | | |
| 401-AB | 465 | 500 | 530 | 580 | 665 | 11.7 | 43.0 | 242 | 65.2 | 920 | 2.74 | 44.5 | |
| | | | | | | 12.6 | 43.0 | 242 | 66.7 | | | | |
| | | | | | | 13.4 | 43.0 | 242 | 68.0 | | | | |
| | | | | | | 14.7 | 43.0 | 242 | 69.8 | | | | |
| | | | | | | 16.6 | 42.2 | 237 | 72.6 | | | | |
| 401-BB | 545 | 580 | 620 | 675 | 770 | 13.5 | 47.0 | 238 | 68.9 | 1040 | 2.17 | 36.1 | |
| | | | | | | 14.5 | 47.0 | 238 | 70.2 | | | | |
| | | | | | | 15.4 | 47.0 | 238 | 71.4 | | | | |
| | | | | | | 16.8 | 47.0 | 238 | 73.0 | | | | |
| | | | | | | 18.8 | 46.2 | 234 | 75.6 | | | | |
| 401-CB | 635 | 680 | 720 | 780 | 890 | 15.3 | 51.0 | 229 | 71.8 | 1210 | 1.78 | 28.5 | |
| | | | | | | 16.3 | 51.0 | 229 | 73.0 | | | | |
| | | | | | | 17.3 | 51.0 | 229 | 74.0 | | | | |
| | | | | | | 18.8 | 51.0 | 229 | 75.5 | | | | |
| | | | | | | 21.0 | 50.1 | 225 | 77.7 | | | | |
| 401-DB | 415 | 750 | 795 | 845 | 915 | 1040 | 10.3 | 60.0 | 236 | 62.7 | 1345 | 1.36 | 21.8 |
| | | | | | | | 18.5 | 60.0 | 236 | 74.4 | | | |
| | | | | | | | 19.7 | 60.0 | 236 | 75.5 | | | |
| | | | | | | | 20.9 | 60.0 | 236 | 76.5 | | | |
| | | | | | | | 22.6 | 60.0 | 236 | 77.8 | | | |
| 401-EB | 515 | 900 | 955 | 1010 | 1095 | 1240 | 12.5 | 69.0 | 233 | 66.8 | 1645 | 1.03 | 16.0 |
| | | | | | | | 22.0 | 69.0 | 233 | 77.2 | | | |
| | | | | | | | 23.3 | 69.0 | 233 | 78.1 | | | |
| | | | | | | | 24.7 | 69.0 | 233 | 79.0 | | | |
| | | | | | | | 26.7 | 69.0 | 233 | 80.1 | | | |
| 401-FB | 660 | 1125 | 1190 | 1260 | 1360 | 1525 | 16.5 | 85.0 | 239 | 72.0 | 1920 | 0.69 | 11.1 |
| | | | | | | | 28.2 | 85.0 | 239 | 80.8 | | | |
| | | | | | | | 29.8 | 85.0 | 239 | 81.5 | | | |
| | | | | | | | 31.5 | 85.0 | 239 | 82.5 | | | |
| | | | | | | | 34.0 | 85.0 | 239 | 83.2 | | | |
| 401-GB | 895 | 1475 | 1560 | 1645 | 1770 | 1975 | 20.9 | 99.0 | 223 | 78.3 | 2575 | 0.42 | 7.1 |
| | | | | | | | 34.4 | 99.0 | 223 | 84.9 | | | |
| | | | | | | | 36.4 | 99.0 | 223 | 85.5 | | | |
| | | | | | | | 38.3 | 99.0 | 223 | 86.0 | | | |
| | | | | | | | 41.2 | 99.0 | 223 | 86.8 | | | |
| 401-HB | 1235 | 2010 | 2120 | 2230 | 2395 | 2670 | 26.8 | 123.0 | 207 | 81.3 | 3000 | 0.28 | 4.0 |
| | | | | | | | 43.5 | 123.0 | 207 | 86.8 | | | |
| | | | | | | | 45.9 | 123.0 | 207 | 87.3 | | | |
| | | | | | | | 48.3 | 123.0 | 207 | 87.8 | | | |
| | | | | | | | 51.9 | 123.0 | 207 | 88.4 | | | |
| | | | | | | | 56.9 | 121.0 | 203 | 89.2 | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 3500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.22 kgm ² | P_f 1050 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 880 m ³ /h | Pr 980 Pa | $W_{(foot)}$ 190 kg | $W_{(flange)}$ 215 kg | | | | |
|-----------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 157... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 301-RC | 650 | 695 | 735 | 800 | 905 | 975 | 12.4 | 41 | 182 | 71.2 | 980 | 2.14 | 33.6 | |
| | | | | | | | 13.3 | 41 | 182 | 72.5 | 980 | | | |
| | | | | | | | 14.0 | 41 | 182 | 73.5 | 980 | | | |
| | | | | | | | 15.3 | 41 | 182 | 75.0 | 980 | | | |
| | | | | | | | 17.0 | 40 | 179 | 77.3 | 980 | | | |
| | | | | | | | 18.0 | 40 | 178 | 78.4 | 980 | | | |
| 301-PC | 735 | 775 | 825 | 890 | 1010 | 1080 | 14.0 | 45 | 182 | 73.5 | 1050 | 1.75 | 28.2 | |
| | | | | | | | 14.8 | 45 | 182 | 74.5 | 1050 | | | |
| | | | | | | | 15.7 | 45 | 182 | 75.5 | 1050 | | | |
| | | | | | | | 17.0 | 45 | 182 | 76.8 | 1050 | | | |
| | | | | | | | 19.0 | 44 | 179 | 78.9 | 1080 | | | |
| | | | | | | | 20.2 | 44 | 178 | 80.0 | 1080 | | | |
| 301-NC | 825 | 875 | 925 | 1000 | 1130 | 1205 | 15.9 | 50 | 185 | 75.7 | 1205 | 1.44 | 23.3 | |
| | | | | | | | 16.9 | 50 | 185 | 76.7 | 1205 | | | |
| | | | | | | | 17.9 | 50 | 185 | 77.6 | 1205 | | | |
| | | | | | | | 19.4 | 50 | 185 | 78.8 | 1205 | | | |
| | | | | | | | 21.5 | 49 | 182 | 80.7 | 1205 | | | |
| | | | | | | | 22.9 | 49 | 181 | 81.7 | 1205 | | | |
| 301-MC | 935 | 990 | 1045 | 1130 | 1275 | 1360 | 18.2 | 56 | 186 | 77.6 | 1400 | 1.17 | 18.9 | |
| | | | | | | | 19.3 | 56 | 186 | 78.5 | 1400 | | | |
| | | | | | | | 20.4 | 56 | 186 | 79.3 | 1400 | | | |
| | | | | | | | 22.0 | 56 | 186 | 80.5 | 1400 | | | |
| | | | | | | | 24.4 | 55 | 183 | 82.2 | 1400 | | | |
| | | | | | | | 25.6 | 54 | 180 | 83.1 | 1400 | | | |
| 301-LC | 1075 | 1135 | 1200 | 1295 | 1455 | 1550 | 20.9 | 63 | 186 | 79.8 | 1575 | 0.92 | 14.9 | |
| | | | | | | | 22.2 | 63 | 186 | 80.6 | 1575 | | | |
| | | | | | | | 23.4 | 63 | 186 | 81.4 | 1575 | | | |
| | | | | | | | 25.3 | 63 | 186 | 82.4 | 1575 | | | |
| | | | | | | | 27.9 | 62 | 183 | 83.9 | 1575 | | | |
| | | | | | | | 29.3 | 61 | 181 | 84.7 | 1575 | | | |
| 301-KC | 1245 | 1320 | 1390 | 1500 | 1680 | 1795 | 24.3 | 72 | 187 | 81.5 | 1850 | 0.72 | 11.5 | |
| | | | | | | | 25.7 | 72 | 187 | 82.3 | 1850 | | | |
| | | | | | | | 27.1 | 72 | 187 | 82.9 | 1850 | | | |
| | | | | | | | 29.3 | 72 | 187 | 83.9 | 1850 | | | |
| | | | | | | | 32.3 | 71 | 183 | 85.3 | 1850 | | | |
| | | | | | | | 34.0 | 70 | 181 | 86.0 | 1850 | | | |
| 301-HC | 1490 | 1575 | 1660 | 1785 | 2000 | 2125 | 29.5 | 85 | 189 | 84.1 | 2125 | 0.50 | 8.4 | |
| | | | | | | | 31.1 | 85 | 189 | 84.7 | 2125 | | | |
| | | | | | | | 32.8 | 85 | 189 | 85.3 | 2125 | | | |
| | | | | | | | 35.3 | 85 | 189 | 86.0 | 2125 | | | |
| | | | | | | | 38.8 | 84 | 186 | 87.2 | 2125 | | | |
| | | | | | | | 41.0 | 83 | 184 | 87.8 | 2125 | | | |
| 301-GC* | 1830 | 1930 | 2030 | 2180 | 2440 | 2590 | 36.1 | 102 | 189 | 86.2 | 2470 | 0.35 | 5.9 | |
| | | | | | | | 37.9 | 102 | 189 | 86.7 | 2470 | | | |
| | | | | | | | 40.1 | 102 | 189 | 87.2 | 2470 | | | |
| | | | | | | | 42.9 | 102 | 189 | 87.9 | 2470 | | | |
| | | | | | | | 47.3 | 100 | 185 | 88.9 | 2590 | | | |
| | | | | | | | 49.6 | 99 | 183 | 89.4 | 2590 | | | |
| 301-FC | 2330 | 2455 | 2580 | 2770 | 3090 | 3280 | 45.8 | 127 | 188 | 88.4 | 3325 | 0.22 | 3.8 | |
| | | | | | | | 48.3 | 127 | 188 | 88.8 | 3325 | | | |
| | | | | | | | 50.8 | 127 | 188 | 89.2 | 3325 | | | |
| | | | | | | | 54.5 | 127 | 188 | 89.7 | 3325 | | | |
| | | | | | | | 59.7 | 125 | 185 | 90.5 | 3325 | | | |
| | | | | | | | 62.9 | 124 | 183 | 90.9 | 3325 | | | |
| 301-EB | 2630 | 2770 | 2910 | 3120 | 3480 | | 51.6 | 142 | 188 | 89.8 | 3500 | 0.18 | 3.0 | |
| | | | | | | | 54.4 | 142 | 188 | 90.2 | 3500 | | | |
| | | | | | | | 57.2 | 142 | 188 | 90.6 | 3500 | | | |
| | | | | | | | 61.3 | 142 | 188 | 91.0 | 3500 | | | |
| | | | | | | | 67.1 | 140 | 184 | 91.7 | 3500 | | | |
| | | | | | | | 61.0 | 166 | 184 | 90.4 | 3500 | | | |
| 301-EC | 3165 | 3335 | | | | | 64.2 | 166 | 184 | 90.7 | 3500 | 0.13 | 2.1 | |
| | | | | | | | | | | | | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 3500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.24 kgm ² | P_f 1050 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 880 m ³ /h | Pr 980 Pa | $W_{(foot)}$ 200 kg | $W_{(flange)}$ 225 kg | | | | |
|---------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 156... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 601-RC | 680 | 720 | 765 | 830 | 935 | 1000 | 14.8 | 47 | 208 | 75.4 | 1075 | 1.59 | 26.3 | |
| | | | | | | | 15.7 | 47 | 208 | 76.4 | | | | |
| | | | | | | | 16.7 | 47 | 208 | 77.3 | | | | |
| | | | | | | | 18.0 | 47 | 208 | 78.6 | | | | |
| | | | | | | | 20.1 | 46 | 205 | 80.5 | | | | |
| 601-PC | 755 | 800 | 845 | 915 | 1035 | 1105 | 21.2 | 46 | 203 | 81.5 | 1180 | 1.36 | 22.1 | |
| | | | | | | | 16.4 | 51 | 207 | 76.9 | | | | |
| | | | | | | | 17.4 | 51 | 207 | 77.9 | | | | |
| | | | | | | | 18.4 | 51 | 207 | 78.7 | | | | |
| | | | | | | | 19.9 | 51 | 207 | 79.5 | | | | |
| 601-NC | 845 | 900 | 950 | 1025 | 1150 | 1225 | 22.0 | 50 | 204 | 81.7 | 1280 | 1.12 | 18.3 | |
| | | | | | | | 23.3 | 50 | 202 | 82.6 | | | | |
| | | | | | | | 18.7 | 57 | 211 | 78.9 | | | | |
| | | | | | | | 19.8 | 57 | 211 | 79.8 | | | | |
| | | | | | | | 20.9 | 57 | 211 | 80.5 | | | | |
| 601-MC | 955 | 1010 | 1065 | 1150 | 1295 | 1380 | 22.6 | 57 | 211 | 81.6 | 1430 | 0.92 | 14.9 | |
| | | | | | | | 24.9 | 56 | 207 | 83.0 | | | | |
| | | | | | | | 26.3 | 55 | 205 | 83.9 | | | | |
| | | | | | | | 20.9 | 63 | 210 | 80.3 | | | | |
| | | | | | | | 22.2 | 63 | 210 | 81.1 | | | | |
| 601-LC | 1095 | 1160 | 1220 | 1315 | 1475 | 1575 | 23.4 | 63 | 210 | 81.9 | 1580 | 0.71 | 11.7 | |
| | | | | | | | 25.3 | 63 | 210 | 82.8 | | | | |
| | | | | | | | 27.9 | 62 | 206 | 84.3 | | | | |
| | | | | | | | 29.5 | 61 | 204 | 85.1 | | | | |
| | | | | | | | 24.4 | 72 | 213 | 82.3 | | | | |
| 601-KC | 1275 | 1345 | 1420 | 1525 | 1710 | 1825 | 25.8 | 72 | 213 | 83.1 | 1800 | 0.54 | 9.0 | |
| | | | | | | | 27.3 | 72 | 213 | 83.7 | | | | |
| | | | | | | | 29.4 | 72 | 213 | 84.6 | | | | |
| | | | | | | | 32.4 | 71 | 210 | 85.9 | | | | |
| | | | | | | | 33.8 | 69 | 205 | 86.6 | | | | |
| 601-HC | 1515 | 1595 | 1680 | 1805 | 2020 | 2155 | 30.1 | 83 | 214 | 84.1 | 1800 | 0.40 | 6.6 | |
| | | | | | | | 31.7 | 83 | 214 | 85.3 | | | | |
| | | | | | | | 34.1 | 83 | 214 | 86.1 | | | | |
| | | | | | | | 37.6 | 81 | 210 | 87.3 | | | | |
| | | | | | | | 38.6 | 78 | 202 | 88.0 | | | | |
| 601-GC | 1845 | 1950 | 2050 | 2200 | 2460 | 2615 | 37.9 | 97 | 215 | 87.0 | 1825 | 0.28 | 4.6 | |
| | | | | | | | 40.7 | 97 | 215 | 87.7 | | | | |
| | | | | | | | 44.7 | 95 | 212 | 88.7 | | | | |
| | | | | | | | 45.1 | 90 | 200 | 89.4 | | | | |
| | | | | | | | 41.1 | 115 | 213 | 87.7 | | | | |
| 601-GB | 2020 | 2130 | 2240 | 2400 | 2680 | 2850 | 43.4 | 115 | 213 | 88.2 | 2095 | 0.25 | 4.0 | |
| | | | | | | | 45.6 | 115 | 213 | 88.6 | | | | |
| | | | | | | | 49.0 | 115 | 213 | 89.2 | | | | |
| | | | | | | | 53.8 | 113 | 209 | 90.1 | | | | |
| | | | | | | | 54.1 | 107 | 197 | 90.6 | | | | |
| 601-FC | 2350 | 2480 | 2605 | 2795 | 3115 | 3315 | 47.9 | 120 | 204 | 89.5 | 2155 | 0.18 | 2.9 | |
| | | | | | | | 51.4 | 120 | 204 | 90.0 | | | | |
| | | | | | | | 56.3 | 118 | 201 | 90.8 | | | | |
| | | | | | | | 59.2 | 117 | 198 | 91.2 | | | | |
| | | | | | | | 52.5 | 144 | 213 | 89.7 | | | | |
| 601-EB | 2640 | 2780 | 2920 | 3140 | 3490 | 3715 | 55.3 | 144 | 213 | 90.1 | 3170 | 0.15 | 2.4 | |
| | | | | | | | 58.1 | 144 | 213 | 90.5 | | | | |
| | | | | | | | 62.3 | 144 | 213 | 90.9 | | | | |
| | | | | | | | 67.6 | 140 | 207 | 91.6 | | | | |
| | | | | | | | 67.5 | 132 | 195 | 91.9 | | | | |
| 601-EC ¹ | 3190 | 3360 | | | | | 59.2 | 144 | 213 | 90.9 | 3170 | 0.10 | 1.7 | |
| | | | | | | | 67.6 | 140 | 207 | 91.6 | | | | |
| | | | | | | | 67.5 | 132 | 195 | 91.9 | | | | |
| 601-EB | 2640 | 2780 | 2920 | 3140 | 3490 | 3715 | 66.9 | 154 | 204 | 91.6 | 3500 | 0.15 | 2.4 | |
| | | | | | | | 62.4 | 154 | 204 | 91.1 | | | | |
| | | | | | | | 66.9 | 154 | 204 | 91.6 | | | | |
| | | | | | | | 73.2 | 151 | 200 | 92.2 | | | | |
| | | | | | | | 70.0 | 189 | 210 | 91.6 | | | | |
| 601-EC ¹ | 3190 | 3360 | | | | | 73.7 | 189 | 210 | 91.8 | 3500 | 0.10 | 1.7 | |
| | | | | | | | 73.7 | 189 | 210 | 91.8 | | | | |

¹ Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Data subject to change without prior notice.

Technical data

| | n_{max} 3500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.25 kgm ² | P_f 1250 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 880 m ³ /h | Pr 980 Pa | $W_{(foot)}$ 230 kg | $W_{(flange)}$ 245 kg | | | | |
|----------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 157... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 201-NC | 620 | 660 | 700 | 760 | 860 | 920 | 15.4 | 50 | 237 | 72.5 | 925 | 1.64 | 28.30 | |
| | | | | | | | 16.4 | 50 | 237 | 73.6 | 925 | | | |
| | | | | | | | 17.4 | 50 | 237 | 74.7 | 925 | | | |
| | | | | | | | 18.8 | 50 | 237 | 76.0 | 925 | | | |
| | | | | | | | 21.0 | 50 | 233 | 78.2 | 925 | | | |
| | | | | | | | 22.3 | 50 | 232 | 79.3 | 925 | | | |
| 201-MC | 710 | 750 | 795 | 860 | 975 | 1040 | 17.6 | 56 | 238 | 74.6 | 1125 | 1.33 | 22.90 | |
| | | | | | | | 18.7 | 56 | 238 | 75.6 | 1125 | | | |
| | | | | | | | 19.8 | 56 | 238 | 76.6 | 1125 | | | |
| | | | | | | | 21.5 | 56 | 238 | 77.9 | 1125 | | | |
| | | | | | | | 23.9 | 55 | 234 | 79.9 | 1125 | | | |
| | | | | | | | 25.1 | 54 | 230 | 80.9 | 1125 | | | |
| 201-LC | 815 | 865 | 915 | 990 | 1115 | 1190 | 20.4 | 63 | 239 | 77.1 | 1265 | 1.05 | 18.10 | |
| | | | | | | | 21.6 | 63 | 239 | 78.0 | 1265 | | | |
| | | | | | | | 22.9 | 63 | 239 | 78.9 | 1265 | | | |
| | | | | | | | 24.7 | 63 | 239 | 80.0 | 1265 | | | |
| | | | | | | | 27.4 | 62 | 235 | 81.8 | 1265 | | | |
| | | | | | | | 28.8 | 61 | 231 | 82.7 | 1265 | | | |
| 201-KC | 950 | 1010 | 1065 | 1150 | 1295 | 1380 | 23.8 | 72 | 238 | 79.1 | 1490 | 0.83 | 13.85 | |
| | | | | | | | 25.2 | 72 | 238 | 79.9 | 1490 | | | |
| | | | | | | | 26.6 | 72 | 238 | 80.7 | 1490 | | | |
| | | | | | | | 28.7 | 72 | 238 | 81.7 | 1490 | | | |
| | | | | | | | 31.7 | 71 | 234 | 83.3 | 1490 | | | |
| | | | | | | | 33.5 | 70 | 232 | 84.2 | 1490 | | | |
| 201-HC | 1145 | 1210 | 1275 | 1375 | 1540 | 1640 | 28.9 | 85 | 242 | 82.0 | 1690 | 0.58 | 10.20 | |
| | | | | | | | 30.6 | 85 | 242 | 82.8 | 1690 | | | |
| | | | | | | | 32.2 | 85 | 242 | 83.4 | 1690 | | | |
| | | | | | | | 34.7 | 85 | 242 | 84.3 | 1690 | | | |
| | | | | | | | 38.3 | 84 | 237 | 85.6 | 1690 | | | |
| | | | | | | | 40.5 | 83 | 235 | 86.3 | 1690 | | | |
| 201-GC* | 1410 | 1485 | 1565 | 1680 | 1885 | 2000 | 35.5 | 102 | 241 | 84.4 | 2000 | 0.4 | 7.05 | |
| | | | | | | | 37.4 | 102 | 241 | 85.0 | 2000 | | | |
| | | | | | | | 39.5 | 102 | 241 | 85.6 | 2000 | | | |
| | | | | | | | 42.3 | 102 | 241 | 86.3 | 2000 | | | |
| | | | | | | | 46.7 | 100 | 237 | 87.5 | 2000 | | | |
| | | | | | | | 48.6 | 98 | 232 | 88.1 | 2000 | | | |
| 201-FC | 1800 | 1895 | 1995 | 2145 | 2390 | 2540 | 45.2 | 127 | 240 | 86.9 | 2675 | 0.25 | 4.50 | |
| | | | | | | | 47.7 | 127 | 240 | 87.4 | 2675 | | | |
| | | | | | | | 50.2 | 127 | 240 | 87.9 | 2675 | | | |
| | | | | | | | 53.9 | 127 | 240 | 88.5 | 2675 | | | |
| | | | | | | | 59.2 | 125 | 236 | 89.4 | 2675 | | | |
| | | | | | | | 62.4 | 124 | 234 | 89.8 | 2675 | | | |
| 201-EB | 2030 | 2140 | 2250 | 2420 | 2700 | 2860 | 50.3 | 140 | 237 | 88.6 | 2980 | 0.21 | 3.63 | |
| | | | | | | | 53.1 | 140 | 237 | 89.0 | 2980 | | | |
| | | | | | | | 55.8 | 140 | 237 | 89.4 | 2980 | | | |
| | | | | | | | 59.9 | 140 | 237 | 89.9 | 2980 | | | |
| | | | | | | | 65.6 | 138 | 233 | 90.7 | 2980 | | | |
| | | | | | | | 69.0 | 136 | 230 | 91.0 | 2980 | | | |
| 201-EC* | 2450 | 2580 | 2715 | 2910 | 3245 | 3460 | 60.4 | 166 | 235 | 89.2 | 3500 | 0.15 | 2.55 | |
| | | | | | | | 63.6 | 166 | 235 | 89.6 | 3500 | | | |
| | | | | | | | 66.8 | 166 | 235 | 90.0 | 3500 | | | |
| | | | | | | | 71.7 | 166 | 235 | 90.4 | 3500 | | | |
| | | | | | | | 78.5 | 163 | 231 | 91.1 | 3500 | | | |
| | | | | | | | 201-CB | 2920 | 3075 | 3230 | 3460 | | | 3700 |
| 77.4 | 200 | 241 | 91.2 | 3500 | | | | | | | | | | |
| 81.2 | 200 | 240 | 91.5 | 3500 | | | | | | | | | | |
| 87.0 | 200 | 240 | 91.8 | 3500 | | | | | | | | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 3500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.27 kgm ² | P_f 1250 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 880 m ³ /h | Pr 980 Pa | $W_{(foot)}$ 230 kg | $W_{(flange)}$ 255 kg | | | |
|---------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|---------------|-------------|
| Cat. Nr | U_a (V):400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 157... | n_b (min ⁻¹) | | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) |
| 501-NC | 640 | 680 | 720 | 780 | 880 | 940 | 18.1 | 57 | 270 | 75.9 | 1035 | 1.28 | 23.6 |
| | | | | | | | 19.2 | 57 | 270 | 76.9 | | | |
| | | | | | | | 20.3 | 57 | 270 | 77.8 | | | |
| | | | | | | | 22.0 | 57 | 270 | 79.0 | | | |
| | | | | | | | 24.4 | 56 | 265 | 80.9 | | | |
| | | | | | | | 25.8 | 55 | 263 | 81.9 | | | |
| 501-MC | 725 | 770 | 815 | 880 | 995 | 1060 | 20.4 | 63 | 269 | 77.7 | 1150 | 1.05 | 19.1 |
| | | | | | | | 21.7 | 63 | 269 | 78.7 | | | |
| | | | | | | | 22.9 | 63 | 269 | 79.5 | | | |
| | | | | | | | 24.7 | 63 | 269 | 80.6 | | | |
| | | | | | | | 27.4 | 62 | 264 | 82.3 | | | |
| | | | | | | | 29.0 | 61 | 261 | 83.2 | | | |
| 501-LC | 840 | 885 | 935 | 1010 | 1135 | 1210 | 23.9 | 72 | 273 | 80.1 | 1275 | 0.81 | 15.1 |
| | | | | | | | 25.3 | 72 | 273 | 80.9 | | | |
| | | | | | | | 26.8 | 72 | 273 | 81.6 | | | |
| | | | | | | | 28.9 | 72 | 273 | 82.6 | | | |
| | | | | | | | 31.9 | 71 | 269 | 84.1 | | | |
| | | | | | | | 33.6 | 70 | 265 | 84.9 | | | |
| 501-KC | 975 | 1035 | 1090 | 1175 | 1315 | 1405 | 28.0 | 83 | 274 | 82.1 | 1450 | 0.62 | 11.6 |
| | | | | | | | 29.6 | 83 | 274 | 82.9 | | | |
| | | | | | | | 31.2 | 83 | 274 | 83.5 | | | |
| | | | | | | | 33.7 | 83 | 274 | 84.4 | | | |
| | | | | | | | 37.1 | 81 | 269 | 85.7 | | | |
| | | | | | | | 39.1 | 80 | 266 | 86.4 | | | |
| 501-HC | 1165 | 1230 | 1295 | 1395 | 1560 | 1660 | 33.6 | 97 | 276 | 84.3 | 1680 | 0.45 | 8.5 |
| | | | | | | | 35.5 | 97 | 276 | 84.9 | | | |
| | | | | | | | 37.4 | 97 | 276 | 85.4 | | | |
| | | | | | | | 40.3 | 97 | 276 | 86.2 | | | |
| | | | | | | | 44.3 | 95 | 271 | 87.4 | | | |
| | | | | | | | 46.6 | 94 | 268 | 88.0 | | | |
| 501-GC | 1425 | 1505 | 1585 | 1700 | 1905 | 2020 | 40.6 | 115 | 273 | 86.3 | 2045 | 0.32 | 5.9 |
| | | | | | | | 42.9 | 115 | 273 | 86.9 | | | |
| | | | | | | | 45.2 | 115 | 273 | 87.4 | | | |
| | | | | | | | 48.5 | 115 | 273 | 88.0 | | | |
| | | | | | | | 53.3 | 113 | 268 | 89.1 | | | |
| | | | | | | | 56.1 | 112 | 265 | 89.6 | | | |
| 501-GB | 1560 | 1650 | 1730 | 1860 | 2080 | 2210 | 42.5 | 120 | 260 | 87.1 | 2420 | 0.29 | 4.9 |
| | | | | | | | 44.9 | 120 | 260 | 87.6 | | | |
| | | | | | | | 47.2 | 120 | 260 | 88.0 | | | |
| | | | | | | | 50.7 | 120 | 260 | 88.6 | | | |
| | | | | | | | 55.6 | 118 | 256 | 89.5 | | | |
| | | | | | | | 58.5 | 117 | 253 | 89.9 | | | |
| 501-FC | 1820 | 1915 | 2015 | 2165 | 2415 | 2560 | 52.0 | 144 | 273 | 88.6 | 2560 | 0.20 | 3.8 |
| | | | | | | | 54.8 | 144 | 273 | 89.0 | | | |
| | | | | | | | 57.6 | 144 | 273 | 89.4 | | | |
| | | | | | | | 61.8 | 144 | 273 | 90.0 | | | |
| | | | | | | | 67.8 | 142 | 268 | 90.7 | | | |
| | | | | | | | 71.2 | 140 | 265 | 91.1 | | | |
| 501-EB | 2050 | 2160 | 2270 | 2430 | 2710 | 2880 | 55.8 | 154 | 261 | 89.4 | 3110 | 0.18 | 2.9 |
| | | | | | | | 58.8 | 154 | 261 | 89.8 | | | |
| | | | | | | | 61.8 | 154 | 261 | 90.1 | | | |
| | | | | | | | 66.3 | 154 | 261 | 90.7 | | | |
| | | | | | | | 72.6 | 151 | 256 | 91.3 | | | |
| | | | | | | | 76.3 | 150 | 253 | 91.7 | | | |
| 501-EC ¹ | 2470 | 2605 | 2735 | 2935 | 3265 | 3465 | 69.5 | 189 | 269 | 90.7 | 3420 | 0.12 | 2.1 |
| | | | | | | | 73.2 | 189 | 269 | 91.0 | | | |
| | | | | | | | 76.9 | 189 | 269 | 91.3 | | | |
| | | | | | | | 82.4 | 189 | 269 | 91.7 | | | |
| | | | | | | | 90.1 | 186 | 264 | 92.3 | | | |
| | | | | | | | 94.6 | 184 | 261 | 92.6 | | | |
| 501-CB | 2940 | 3095 | 3250 | 3480 | | | 77.9 | 210 | 253 | 91.6 | 3500 | 0.09 | 1.5 |
| | | | | | | | 82.0 | 210 | 253 | 91.8 | | | |
| | | | | | | | 86.0 | 210 | 253 | 92.1 | | | |
| | | | | | | | 92.2 | 210 | 253 | 92.4 | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Data subject to change without prior notice.

Technical data

| | n_{max} 3500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.31 kgm ² | P_f 1400 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 880 m ³ /h | Pr 980 Pa | $W_{(foot)}$ 275 kg | $W_{(flange)}$ 290 kg | | | | |
|----------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 157... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 101-LC | 605 | 645 | 680 | 740 | 835 | 895 | 19.6 | 63 | 310 | 73.8 | 1000 | 1.24 | 22.60 | |
| | | | | | | | 20.9 | 63 | 310 | 74.9 | 1000 | | | |
| | | | | | | | 22.1 | 63 | 310 | 75.9 | 1000 | | | |
| | | | | | | | 24.0 | 63 | 310 | 77.2 | 1000 | | | |
| | | | | | | | 26.6 | 62 | 305 | 79.2 | 1000 | | | |
| 101-KC | 710 | 750 | 795 | 860 | 970 | 1035 | 28.1 | 61 | 300 | 80.3 | 1000 | 0.97 | 17.30 | |
| | | | | | | | 23.0 | 72 | 310 | 76.2 | 1175 | | | |
| | | | | | | | 24.4 | 72 | 310 | 77.1 | 1175 | | | |
| | | | | | | | 25.8 | 72 | 310 | 78.0 | 1175 | | | |
| | | | | | | | 27.9 | 72 | 310 | 79.2 | 1175 | | | |
| 101-HC | 860 | 910 | 960 | 1035 | 1165 | 1240 | 28.2 | 85 | 313 | 79.5 | 1330 | 0.68 | 12.70 | |
| | | | | | | | 29.8 | 85 | 313 | 80.4 | 1330 | | | |
| | | | | | | | 31.5 | 85 | 313 | 81.1 | 1330 | | | |
| | | | | | | | 34.0 | 85 | 313 | 82.1 | 1330 | | | |
| | | | | | | | 37.5 | 84 | 308 | 83.7 | 1330 | | | |
| 101-GC | 1060 | 1120 | 1180 | 1270 | 1425 | 1515 | 34.7 | 102 | 313 | 82.3 | 1565 | 0.48 | 8.85 | |
| | | | | | | | 36.6 | 102 | 313 | 83.0 | 1565 | | | |
| | | | | | | | 38.7 | 102 | 313 | 83.6 | 1565 | | | |
| | | | | | | | 41.6 | 102 | 313 | 84.5 | 1565 | | | |
| | | | | | | | 45.9 | 100 | 308 | 85.8 | 1565 | | | |
| 101-FC* | 1360 | 1435 | 1510 | 1625 | 1815 | 1930 | 44.4 | 127 | 312 | 85.1 | 2105 | 0.30 | 5.65 | |
| | | | | | | | 46.9 | 127 | 312 | 85.7 | 2105 | | | |
| | | | | | | | 49.4 | 127 | 312 | 86.2 | 2105 | | | |
| | | | | | | | 53.1 | 127 | 312 | 86.9 | 2105 | | | |
| | | | | | | | 58.4 | 125 | 307 | 88.0 | 2105 | | | |
| 101-EB | 1540 | 1620 | 1710 | 1840 | 2050 | 2180 | 61.6 | 124 | 305 | 88.5 | 2105 | 0.25 | 4.60 | |
| | | | | | | | 49.6 | 140 | 308 | 87.1 | 2350 | | | |
| | | | | | | | 52.3 | 140 | 308 | 87.6 | 2350 | | | |
| | | | | | | | 55.1 | 140 | 308 | 88.0 | 2350 | | | |
| | | | | | | | 59.1 | 140 | 308 | 88.6 | 2350 | | | |
| 101-EC* | 1860 | 1960 | 2060 | 2215 | 2470 | 2620 | 64.9 | 138 | 302 | 89.5 | 2350 | 0.18 | 3.20 | |
| | | | | | | | 68.2 | 136 | 299 | 90.0 | 2350 | | | |
| | | | | | | | 59.6 | 166 | 306 | 87.9 | 2815 | | | |
| | | | | | | | 62.8 | 166 | 306 | 88.3 | 2815 | | | |
| | | | | | | | 66.1 | 166 | 306 | 88.7 | 2815 | | | |
| 101-CB* | 2220 | 2340 | 2460 | 2635 | 2935 | 3110 | 70.9 | 166 | 306 | 89.3 | 2815 | 0.11 | 2.30 | |
| | | | | | | | 77.7 | 163 | 301 | 90.1 | 2815 | | | |
| | | | | | | | 81.9 | 162 | 298 | 90.5 | 2815 | | | |
| | | | | | | | 73.1 | 200 | 314 | 90.3 | 3230 | | | |
| | | | | | | | 76.9 | 200 | 314 | 90.5 | 3230 | | | |
| 101-BB* | 2815 | 2960 | 3100 | 3330 | | | 80.9 | 200 | 314 | 90.9 | 3230 | 0.08 | 1.50 | |
| | | | | | | | 86.7 | 200 | 314 | 91.3 | 3230 | | | |
| | | | | | | | 96.4 | 200 | 314 | 91.9 | 3230 | | | |
| | | | | | | | 86.4 | 234 | 294 | 91.4 | 3500 | | | |
| | | | | | | | 91.0 | 234 | 294 | 91.7 | 3500 | | | |
| | | | | | | | 95.5 | 234 | 294 | 91.9 | 3500 | | | |
| | | | | | | | 102.0 | 234 | 293 | 92.3 | 3500 | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 3500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.33 kgm ² | P_f 1400 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 880 m ³ /h | Pr 980 Pa | $W_{(foot)}$ 280 kg | $W_{(flange)}$ 305 kg | | | | |
|---------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 157... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 401-LC | 620 | 660 | 695 | 755 | 850 | 910 | 23.2 | 72 | 357 | 77.7 | 990 | 0.95 | 19.6 | |
| | | | | | | | 24.6 | 72 | 357 | 78.6 | | | | |
| | | | | | | | 26.0 | 72 | 357 | 79.5 | | | | |
| | | | | | | | 28.2 | 72 | 357 | 80.6 | | | | |
| | | | | | | | 31.2 | 71 | 350 | 82.0 | | | | |
| 401-KC | 725 | 770 | 815 | 880 | 990 | 1055 | 32.9 | 70 | 346 | 82.9 | 1130 | 0.73 | 15 | |
| | | | | | | | 27.2 | 83 | 358 | 80.0 | | | | |
| | | | | | | | 28.9 | 83 | 358 | 80.7 | | | | |
| | | | | | | | 30.5 | 83 | 358 | 81.2 | | | | |
| | | | | | | | 32.9 | 83 | 358 | 82.2 | | | | |
| 401-HC | 870 | 920 | 970 | 1045 | 1175 | 1250 | 36.3 | 81 | 351 | 83.8 | 1310 | 0.53 | 11 | |
| | | | | | | | 38.4 | 80 | 348 | 84.6 | | | | |
| | | | | | | | 32.9 | 97 | 361 | 82.4 | | | | |
| | | | | | | | 34.7 | 97 | 361 | 83.1 | | | | |
| | | | | | | | 36.6 | 97 | 361 | 83.8 | | | | |
| 401-GC | 1070 | 1130 | 1190 | 1280 | 1435 | 1530 | 39.5 | 97 | 361 | 84.7 | 1590 | 0.37 | 7.6 | |
| | | | | | | | 43.5 | 95 | 354 | 85.7 | | | | |
| | | | | | | | 45.9 | 94 | 350 | 86.4 | | | | |
| | | | | | | | 39.9 | 115 | 357 | 84.8 | | | | |
| | | | | | | | 42.2 | 115 | 357 | 85.4 | | | | |
| 401-GB | 1180 | 1250 | 1310 | 1410 | 1580 | 1680 | 44.4 | 115 | 357 | 85.9 | 1900 | 0.33 | 6.6 | |
| | | | | | | | 47.8 | 115 | 357 | 86.7 | | | | |
| | | | | | | | 52.5 | 113 | 349 | 87.6 | | | | |
| | | | | | | | 55.3 | 112 | 346 | 88.2 | | | | |
| | | | | | | | 41.9 | 120 | 340 | 85.7 | | | | |
| 401-FC | 1370 | 1450 | 1525 | 1635 | 1825 | 1940 | 44.3 | 120 | 340 | 86.2 | 1985 | 0.24 | 4.9 | |
| | | | | | | | 46.6 | 120 | 340 | 86.7 | | | | |
| | | | | | | | 50.1 | 120 | 340 | 87.4 | | | | |
| | | | | | | | 55.1 | 118 | 334 | 88.5 | | | | |
| | | | | | | | 58.0 | 117 | 330 | 89.0 | | | | |
| 401-EB | 1550 | 1640 | 1720 | 1850 | 2060 | 2190 | 51.3 | 144 | 357 | 87.5 | 2450 | 0.21 | 4.0 | |
| | | | | | | | 54.1 | 144 | 357 | 87.9 | | | | |
| | | | | | | | 56.9 | 144 | 357 | 88.4 | | | | |
| | | | | | | | 61.1 | 144 | 357 | 89.0 | | | | |
| | | | | | | | 66.9 | 142 | 350 | 89.5 | | | | |
| 401-EC ¹ | 1870 | 1970 | 2075 | 2225 | 2475 | 2630 | 70.3 | 140 | 346 | 89.9 | 2690 | 0.14 | 2.8 | |
| | | | | | | | 55.0 | 154 | 339 | 88.0 | | | | |
| | | | | | | | 58.1 | 154 | 339 | 88.5 | | | | |
| | | | | | | | 61.1 | 154 | 339 | 88.9 | | | | |
| | | | | | | | 65.6 | 154 | 339 | 89.4 | | | | |
| 401-CB | 2230 | 2350 | 2465 | 2645 | 2940 | 3120 | 71.9 | 151 | 333 | 90.2 | 3480 | 0.1 | 2 | |
| | | | | | | | 75.5 | 150 | 329 | 90.7 | | | | |
| | | | | | | | 68.8 | 189 | 351 | 89.8 | | | | |
| | | | | | | | 72.5 | 189 | 351 | 90.1 | | | | |
| | | | | | | | 76.2 | 189 | 351 | 90.5 | | | | |
| 401-BB ¹ | 2810 | 2960 | 3105 | 3325 | | | 81.7 | 189 | 351 | 90.9 | 3500 | 0.07 | 1.3 | |
| | | | | | | | 89.2 | 186 | 344 | 91.3 | | | | |
| | | | | | | | 93.7 | 184 | 340 | 91.6 | | | | |
| | | | | | | | 77.4 | 210 | 331 | 90.8 | | | | |
| | | | | | | | 81.4 | 210 | 331 | 91.1 | | | | |
| | | | | | | | 85.5 | 210 | 331 | 91.4 | | | | |
| | | | | | | | 91.6 | 210 | 331 | 91.8 | | | | |
| | | | | | | | 100.1 | 207 | 325 | 92.3 | | | | |
| | | | | | | | 105.1 | 204 | 321 | 92.5 | | | | |
| | | | | | | | 92.6 | 250 | 315 | 91.6 | | | | |
| | | | | | | | 97.5 | 250 | 315 | 91.8 | | | | |
| | | | | | | | 102.3 | 250 | 315 | 92.1 | | | | |
| | | | | | | | 109.6 | 250 | 315 | 92.4 | | | | |

¹ Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 3500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.46 kgm ² | P_f 2000 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 880 m ³ /h | Pr 980 Pa | $W_{(foot)}$ 380 kg | $W_{(flange)}$ 405 kg | | | | |
|---------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|-------------------------------------|----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 157... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 701-LC | 410 | 435 | 460 | 500 | 570 | 615 | 21.8 | 72 | 508 | 72.2 | 715 | 1.21 | 29 | |
| | | | | | | | 23.2 | 72 | 508 | 73.4 | | | | |
| | | | | | | | 24.6 | 72 | 508 | 74.4 | | | | |
| | | | | | | | 26.7 | 72 | 508 | 75.8 | | | | |
| | | | | | | | 29.9 | 71 | 500 | 78.2 | | | | |
| | | | | | | | 31.7 | 70 | 494 | 79.4 | | | | |
| 701-KC | 485 | 515 | 545 | 590 | 670 | 715 | 25.8 | 83 | 509 | 75.0 | 815 | 0.94 | 22.2 | |
| | | | | | | | 27.4 | 83 | 510 | 76.1 | | | | |
| | | | | | | | 29.0 | 83 | 510 | 77.0 | | | | |
| | | | | | | | 31.5 | 83 | 510 | 78.3 | | | | |
| | | | | | | | 35.0 | 81 | 501 | 80.2 | | | | |
| | | | | | | | 37.1 | 80 | 496 | 81.2 | | | | |
| 701-HC | 585 | 620 | 655 | 705 | 800 | 850 | 31.4 | 97 | 514 | 78.2 | 945 | 0.69 | 16.3 | |
| | | | | | | | 33.3 | 97 | 514 | 79.0 | | | | |
| | | | | | | | 35.2 | 97 | 514 | 79.9 | | | | |
| | | | | | | | 38.0 | 97 | 514 | 81.0 | | | | |
| | | | | | | | 42.2 | 95 | 505 | 82.6 | | | | |
| | | | | | | | 44.6 | 94 | 500 | 83.5 | | | | |
| 701-GC | 725 | 765 | 810 | 870 | 985 | 1045 | 38.5 | 115 | 508 | 81.2 | 1145 | 0.47 | 11.3 | |
| | | | | | | | 40.7 | 115 | 508 | 81.9 | | | | |
| | | | | | | | 43.0 | 115 | 508 | 82.6 | | | | |
| | | | | | | | 46.3 | 115 | 508 | 83.6 | | | | |
| | | | | | | | 51.3 | 113 | 499 | 85.1 | | | | |
| | | | | | | | 54.1 | 112 | 494 | 85.9 | | | | |
| 701-GB | 800 | 840 | 890 | 960 | 1070 | 1150 | 40.6 | 120 | 487 | 82.2 | 1350 | 0.43 | 9.6 | |
| | | | | | | | 43.0 | 120 | 487 | 82.9 | | | | |
| | | | | | | | 45.3 | 120 | 487 | 83.6 | | | | |
| | | | | | | | 48.9 | 120 | 487 | 84.5 | | | | |
| | | | | | | | 53.9 | 118 | 479 | 85.8 | | | | |
| | | | | | | | 56.8 | 117 | 474 | 86.5 | | | | |
| 701-FC | 935 | 990 | 1045 | 1120 | 1255 | 1335 | 49.9 | 144 | 509 | 84.5 | 1430 | 0.30 | 7.3 | |
| | | | | | | | 52.7 | 144 | 509 | 85.1 | | | | |
| | | | | | | | 55.5 | 144 | 509 | 85.7 | | | | |
| | | | | | | | 59.7 | 144 | 509 | 86.4 | | | | |
| | | | | | | | 65.8 | 142 | 500 | 87.6 | | | | |
| | | | | | | | 69.2 | 140 | 495 | 88.1 | | | | |
| 701-EB | 1060 | 1110 | 1170 | 1260 | 1410 | 1500 | 53.8 | 154 | 487 | 85.3 | 1750 | 0.27 | 5.8 | |
| | | | | | | | 56.8 | 154 | 487 | 85.9 | | | | |
| | | | | | | | 59.8 | 154 | 487 | 86.4 | | | | |
| | | | | | | | 64.3 | 154 | 487 | 87.1 | | | | |
| | | | | | | | 70.7 | 151 | 478 | 88.2 | | | | |
| | | | | | | | 74.4 | 150 | 473 | 88.7 | | | | |
| 701-EC ¹ | 1290 | 1360 | 1430 | 1535 | 1710 | 1820 | 67.4 | 189 | 500 | 87.6 | 1995 | 0.17 | 4.1 | |
| | | | | | | | 71.1 | 189 | 500 | 88.0 | | | | |
| | | | | | | | 74.9 | 189 | 500 | 88.5 | | | | |
| | | | | | | | 80.4 | 189 | 500 | 89.0 | | | | |
| | | | | | | | 88.1 | 186 | 492 | 89.8 | | | | |
| | | | | | | | 92.6 | 184 | 486 | 90.3 | | | | |
| 701-CB ¹ | 1540 | 1625 | 1705 | 1830 | 2040 | 2165 | 76.4 | 210 | 473 | 89.3 | 2510 | 0.12 | 3 | |
| | | | | | | | 80.5 | 210 | 473 | 89.7 | | | | |
| | | | | | | | 84.6 | 210 | 473 | 90.0 | | | | |
| | | | | | | | 90.7 | 210 | 473 | 90.5 | | | | |
| | | | | | | | 99.3 | 207 | 465 | 91.2 | | | | |
| | | | | | | | 104.3 | 204 | 460 | 91.5 | | | | |
| 701-BB ² | 1945 | 2050 | 2155 | 2310 | 2570 | 2725 | 91.7 | 250 | 450 | 90.4 | 2745 | 0.09 | 1.9 | |
| | | | | | | | 96.6 | 250 | 450 | 90.7 | | | | |
| | | | | | | | 101.4 | 250 | 450 | 91.0 | | | | |
| | | | | | | | 108.7 | 250 | 450 | 91.4 | | | | |
| | | | | | | | 118.9 | 246 | 442 | 91.9 | | | | |
| | | | | | | | 124.8 | 243 | 437 | 92.2 | | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

2 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 15% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 4500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.39 kgm ² | P_f 1520 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 1300 m ³ /h | Pr 1250 Pa | $W_{(foot)}$ 290 kg | $W_{(flange)}$ 320 kg | | | | |
|---------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|--------------------------------------|-----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 159... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 101-RC | 650 | 700 | 730 | 790 | 900 | 950 | 27 | 85 | 400 | 77.9 | 2300 | 0.73 | 15.7 | |
| | | | | | | | 29 | 85 | 400 | 78.9 | | | | |
| | | | | | | | 31 | 85 | 400 | 79.7 | | | | |
| | | | | | | | 33 | 85 | 400 | 80.8 | | | | |
| | | | | | | | 37 | 84 | 394 | 82.5 | | | | |
| | | | | | | | 39 | 83 | 389 | 83.4 | | | | |
| 101-PC | 750 | 800 | 840 | 900 | 1020 | 1090 | 32 | 97 | 406 | 80.2 | 1500 | 0.63 | 12.4 | |
| | | | | | | | 34 | 97 | 406 | 81.0 | | | | |
| | | | | | | | 36 | 97 | 406 | 81.7 | | | | |
| | | | | | | | 39 | 97 | 406 | 82.7 | | | | |
| | | | | | | | 43 | 95 | 399 | 84.2 | | | | |
| | | | | | | | 45 | 94 | 395 | 85.0 | | | | |
| 101-NC | 880 | 930 | 980 | 1060 | 1190 | 1260 | 37 | 111 | 407 | 82.4 | 2730 | 0.47 | 9.5 | |
| | | | | | | | 40 | 111 | 407 | 83.1 | | | | |
| | | | | | | | 42 | 111 | 407 | 83.7 | | | | |
| | | | | | | | 45 | 111 | 407 | 84.6 | | | | |
| | | | | | | | 50 | 109 | 400 | 85.9 | | | | |
| | | | | | | | 52 | 108 | 396 | 86.6 | | | | |
| 101-LC | 1040 | 1100 | 1160 | 1250 | 1400 | 1490 | 43 | 126 | 396 | 84.0 | 3740 | 0.37 | 7 | |
| | | | | | | | 46 | 126 | 396 | 84.6 | | | | |
| | | | | | | | 48 | 126 | 396 | 85.2 | | | | |
| | | | | | | | 52 | 126 | 396 | 86.0 | | | | |
| | | | | | | | 57 | 124 | 389 | 87.1 | | | | |
| | | | | | | | 60 | 123 | 385 | 87.8 | | | | |
| 101-HC | 1280 | 1350 | 1420 | 1530 | 1700 | 1810 | 53 | 152 | 398 | 86.0 | 3910 | 0.26 | 4.8 | |
| | | | | | | | 56 | 152 | 398 | 86.5 | | | | |
| | | | | | | | 59 | 152 | 398 | 87.0 | | | | |
| | | | | | | | 64 | 152 | 398 | 87.7 | | | | |
| | | | | | | | 70 | 149 | 391 | 88.7 | | | | |
| | | | | | | | 81 | 148 | 387 | 89.2 | | | | |
| 101-GB | 1400 | 1480 | 1560 | 1680 | 1870 | 1990 | 59 | 166 | 400 | 87.2 | 2100 | 0.21 | 4.1 | |
| | | | | | | | 62 | 166 | 400 | 87.6 | | | | |
| | | | | | | | 65 | 166 | 400 | 88.1 | | | | |
| | | | | | | | 70 | 166 | 400 | 88.7 | | | | |
| | | | | | | | 77 | 163 | 393 | 89.6 | | | | |
| | | | | | | | 94 | 162 | 389 | 90.0 | | | | |
| 101-FC* | 1630 | 1720 | 1810 | 1940 | 2170 | 2300 | 69 | 192 | 402 | 88.2 | 4500 | 0.16 | 3.1 | |
| | | | | | | | 72 | 192 | 402 | 88.7 | | | | |
| | | | | | | | 76 | 192 | 402 | 89.1 | | | | |
| | | | | | | | 82 | 192 | 402 | 89.6 | | | | |
| | | | | | | | 90 | 189 | 395 | 90.4 | | | | |
| | | | | | | | 94 | 187 | 391 | 90.6 | | | | |
| 101-EB | 1840 | 1930 | 2040 | 2200 | 2470 | 2620 | 75 | 207 | 387 | 89.0 | 1950 | 0.13 | 2.5 | |
| | | | | | | | 79 | 207 | 387 | 89.4 | | | | |
| | | | | | | | 79 | 198 | 370 | 89.9 | | | | |
| | | | | | | | 79 | 184 | 343 | 90.6 | | | | |
| | | | | | | | 79 | 164 | 306 | 91.3 | | | | |
| | | | | | | | 79 | 154 | 287 | 91.6 | | | | |
| 101-DC ¹ | 2220 | 2340 | 2460 | 2630 | 2930 | 3110 | 89 | 245 | 384 | 90.2 | 4500 | 0.1 | 1.7 | |
| | | | | | | | 94 | 245 | 384 | 90.5 | | | | |
| | | | | | | | 99 | 245 | 384 | 90.8 | | | | |
| | | | | | | | 106 | 245 | 384 | 91.2 | | | | |
| | | | | | | | 116 | 241 | 377 | 91.9 | | | | |
| | | | | | | | 122 | 238 | 373 | 92.1 | | | | |
| 101-CB ¹ | 2640 | 2780 | 2930 | 3140 | 3500 | 3720 | 110 | 299 | 400 | 91.4 | 2660 | 0.06 | 1.3 | |
| | | | | | | | 111 | 286 | 382 | 91.8 | | | | |
| | | | | | | | 111 | 272 | 363 | 92.1 | | | | |
| | | | | | | | 111 | 253 | 337 | 92.5 | | | | |
| | | | | | | | 111 | 227 | 302 | 92.9 | | | | |
| | | | | | | | 111 | 214 | 284 | 93.1 | | | | |
| 101-BB ¹ | 3330 | 3500 | 3690 | 3950 | 4400 | 4400 | 137 | 368 | 393 | 92.4 | 3390 | 0.04 | 0.8 | |
| | | | | | | | 139 | 356 | 380 | 92.6 | | | | |
| | | | | | | | 139 | 338 | 361 | 92.9 | | | | |
| | | | | | | | 139 | 315 | 335 | 93.2 | | | | |
| | | | | | | | 139 | 283 | 300 | 93.5 | | | | |
| | | | | | | | 139 | 283 | 300 | 93.5 | | | | |

¹ Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 15% reduction of power.

* Normally kept in stock with reinforced impregnation.

Data subject to change without prior notice.

Technical data

| | n_{max} 4500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.47 kgm ² | P_f 1670 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 1300 m ³ /h | Pr 1250 Pa | $W_{(foot)}$ 330 kg | $W_{(flange)}$ 360 kg | | | |
|-----------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|--------------------------------------|-----------------|------------------------|--------------------------|-------------|------|------|
| Cat. Nr | U_a (V): 400 420 440 470 520 550 | | | | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) | | |
| FR 159... | n_b (min ⁻¹) | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | | |
| 201-RC | 540 | 570 | 600 | 660 | 740 | 790 | 27 | 85 | 472 | 75.6 | 1800 | 0.81 | 18.7 |
| | | | | | | | 28 | 85 | 472 | 76.6 | | | |
| | | | | | | | 30 | 85 | 472 | 77.5 | | | |
| | | | | | | | 32 | 85 | 472 | 78.8 | | | |
| | | | | | | | 36 | 84 | 464 | 80.7 | | | |
| | | | | | | | 38 | 83 | 459 | 81.7 | | | |
| 201-PC | 625 | 660 | 700 | 755 | 855 | 910 | 31 | 97 | 479 | 78.4 | 1200 | 0.69 | 14.8 |
| | | | | | | | 33 | 97 | 479 | 79.3 | | | |
| | | | | | | | 35 | 97 | 479 | 80.1 | | | |
| | | | | | | | 38 | 97 | 479 | 81.2 | | | |
| | | | | | | | 42 | 95 | 471 | 82.9 | | | |
| | | | | | | | 44 | 94 | 466 | 83.8 | | | |
| 201-NC | 735 | 775 | 820 | 885 | 995 | 1060 | 37 | 111 | 480 | 81.0 | 2360 | 0.52 | 11.3 |
| | | | | | | | 39 | 111 | 480 | 81.8 | | | |
| | | | | | | | 41 | 111 | 480 | 82.5 | | | |
| | | | | | | | 44 | 111 | 480 | 83.4 | | | |
| | | | | | | | 49 | 109 | 472 | 84.9 | | | |
| | | | | | | | 52 | 108 | 467 | 85.6 | | | |
| 201-LC | 875 | 925 | 975 | 1050 | 1175 | 1255 | 43 | 126 | 467 | 82.8 | 3230 | 0.41 | 8.3 |
| | | | | | | | 45 | 126 | 467 | 83.5 | | | |
| | | | | | | | 48 | 126 | 467 | 84.1 | | | |
| | | | | | | | 51 | 126 | 467 | 85.0 | | | |
| | | | | | | | 57 | 124 | 459 | 86.3 | | | |
| | | | | | | | 60 | 123 | 454 | 86.9 | | | |
| 201-HC | 1075 | 1135 | 1195 | 1285 | 1440 | 1530 | 53 | 152 | 469 | 85.1 | 3390 | 0.28 | 5.8 |
| | | | | | | | 56 | 152 | 469 | 85.7 | | | |
| | | | | | | | 59 | 152 | 469 | 86.3 | | | |
| | | | | | | | 63 | 152 | 469 | 87.0 | | | |
| | | | | | | | 69 | 149 | 461 | 88.1 | | | |
| | | | | | | | 73 | 148 | 456 | 88.6 | | | |
| 201-GB | 1175 | 1245 | 1310 | 1410 | 1575 | 1675 | 58 | 166 | 471 | 86.1 | 1700 | 0.24 | 4.9 |
| | | | | | | | 61 | 166 | 471 | 86.7 | | | |
| | | | | | | | 65 | 166 | 471 | 87.1 | | | |
| | | | | | | | 70 | 166 | 471 | 87.8 | | | |
| | | | | | | | 76 | 163 | 463 | 88.8 | | | |
| | | | | | | | 80 | 162 | 458 | 89.3 | | | |
| 201-FC* | 1375 | 1450 | 1530 | 1640 | 1830 | 1945 | 68 | 192 | 474 | 87.7 | 4200 | 0.17 | 3.7 |
| | | | | | | | 72 | 192 | 474 | 88.2 | | | |
| | | | | | | | 76 | 192 | 474 | 88.6 | | | |
| | | | | | | | 82 | 192 | 474 | 89.2 | | | |
| | | | | | | | 89 | 189 | 456 | 90.0 | | | |
| | | | | | | | 94 | 187 | 461 | 90.5 | | | |
| 201-EB | 1550 | 1630 | 1710 | 1840 | 2050 | 2180 | 74 | 207 | 453 | 87.8 | 2500 | 0.15 | 3 |
| | | | | | | | 78 | 207 | 457 | 88.4 | | | |
| | | | | | | | 82 | 207 | 457 | 88.8 | | | |
| | | | | | | | 88 | 207 | 457 | 89.4 | | | |
| | | | | | | | 96 | 204 | 449 | 90.1 | | | |
| | | | | | | | 101 | 202 | 444 | 90.5 | | | |
| 201-DC | 1870 | 1970 | 2070 | 2220 | 2475 | 2630 | 89 | 245 | 453 | 89.5 | 4500 | 0.11 | 2.1 |
| | | | | | | | 94 | 245 | 453 | 89.9 | | | |
| | | | | | | | 98 | 245 | 453 | 90.2 | | | |
| | | | | | | | 105 | 245 | 453 | 90.7 | | | |
| | | | | | | | 115 | 241 | 445 | 91.4 | | | |
| | | | | | | | 121 | 238 | 441 | 91.7 | | | |
| 201-CB' | 2230 | 2350 | 2470 | 2660 | 2960 | 3150 | 110 | 299 | 471 | 91.0 | 2300 | 0.07 | 1.5 |
| | | | | | | | 113 | 293 | 462 | 91.4 | | | |
| | | | | | | | 113 | 278 | 438 | 91.8 | | | |
| | | | | | | | 113 | 259 | 407 | 92.2 | | | |
| | | | | | | | 113 | 232 | 364 | 92.7 | | | |
| | | | | | | | 113 | 219 | 342 | 92.9 | | | |
| 201-BB' | 2810 | 2960 | 3110 | 3340 | 3720 | 3950 | 136 | 368 | 464 | 92.0 | 2930 | 0.05 | 1 |
| | | | | | | | 142 | 365 | 460 | 92.2 | | | |
| | | | | | | | 142 | 346 | 436 | 92.6 | | | |
| | | | | | | | 142 | 322 | 405 | 92.9 | | | |
| | | | | | | | 141 | 289 | 363 | 93.2 | | | |
| | | | | | | | 141 | 273 | 341 | 93.4 | | | |
| 201-AB' | 3800 | | | | | | 168 | 450 | 424 | 93.0 | 4000 | 0.03 | 0.5 |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 15% reduction of power.

* Normally kept in stock with reinforced impregnation.

Data subject to change without prior notice.

Technical data

| | n_{max} 4500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.55 kgm ² | P_f 1900 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 1300 m ³ /h | Pr 1250 Pa | $W_{(foot)}$ 380 kg | $W_{(flange)}$ 410 kg | | | | |
|----------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|--------------------------------------|-----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 159... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 301-PC | 490 | 520 | 550 | 600 | 675 | 725 | 31 | 101 | 613 | 75.6 | 900 | 0.69 | 18.1 | |
| | | | | | | | 33 | 101 | 613 | 76.6 | | | | |
| | | | | | | | 35 | 101 | 613 | 77.6 | | | | |
| | | | | | | | 38 | 101 | 613 | 78.8 | | | | |
| | | | | | | | 43 | 99 | 603 | 80.8 | | | | |
| | | | | | | | 45 | 98 | 596 | 81.7 | | | | |
| 301-NC | 575 | 610 | 645 | 700 | 790 | 845 | 38 | 117 | 621 | 78.2 | 1860 | 0.53 | 13.9 | |
| | | | | | | | 40 | 117 | 621 | 79.1 | | | | |
| | | | | | | | 42 | 117 | 621 | 80.0 | | | | |
| | | | | | | | 46 | 117 | 621 | 81.1 | | | | |
| | | | | | | | 51 | 115 | 611 | 82.8 | | | | |
| | | | | | | | 53 | 114 | 605 | 83.7 | | | | |
| 301-LC | 690 | 730 | 775 | 835 | 940 | 1000 | 44 | 132 | 601 | 80.5 | 2550 | 0.4 | 10.2 | |
| | | | | | | | 46 | 132 | 601 | 81.3 | | | | |
| | | | | | | | 49 | 132 | 601 | 82.1 | | | | |
| | | | | | | | 53 | 132 | 601 | 83.0 | | | | |
| | | | | | | | 58 | 130 | 590 | 84.6 | | | | |
| | | | | | | | 61 | 128 | 584 | 85.3 | | | | |
| 301-HC | 850 | 900 | 950 | 1025 | 1150 | 1225 | 54 | 159 | 603 | 83.1 | 2690 | 0.28 | 7.1 | |
| | | | | | | | 57 | 159 | 603 | 83.8 | | | | |
| | | | | | | | 60 | 159 | 603 | 84.4 | | | | |
| | | | | | | | 65 | 159 | 603 | 85.2 | | | | |
| | | | | | | | 71 | 156 | 593 | 86.5 | | | | |
| | | | | | | | 75 | 155 | 587 | 87.2 | | | | |
| 301-GB | 940 | 995 | 1050 | 1130 | 1265 | 1345 | 60 | 174 | 607 | 84.6 | 1360 | 0.26 | 6 | |
| | | | | | | | 63 | 174 | 607 | 85.1 | | | | |
| | | | | | | | 67 | 174 | 607 | 85.7 | | | | |
| | | | | | | | 72 | 174 | 607 | 86.5 | | | | |
| | | | | | | | 79 | 171 | 597 | 87.6 | | | | |
| | | | | | | | 83 | 169 | 591 | 88.2 | | | | |
| 301-FC | 1100 | 1165 | 1225 | 1320 | 1475 | 1565 | 70 | 201 | 610 | 86.3 | 3330 | 0.19 | 4.5 | |
| | | | | | | | 74 | 201 | 610 | 86.8 | | | | |
| | | | | | | | 78 | 201 | 610 | 87.3 | | | | |
| | | | | | | | 84 | 201 | 610 | 88.0 | | | | |
| | | | | | | | 93 | 198 | 599 | 89.0 | | | | |
| | | | | | | | 97 | 196 | 593 | 89.4 | | | | |
| 301-EB | 1240 | 1310 | 1380 | 1500 | 1680 | 1790 | 77 | 218 | 591 | 86.9 | 1330 | 0.17 | 3.6 | |
| | | | | | | | 81 | 218 | 591 | 87.4 | | | | |
| | | | | | | | 83 | 211 | 571 | 88.0 | | | | |
| | | | | | | | 83 | 195 | 528 | 88.9 | | | | |
| | | | | | | | 82 | 173 | 469 | 90.0 | | | | |
| | | | | | | | 82 | 163 | 440 | 90.5 | | | | |
| 301-DC ^{1*} | 1510 | 1590 | 1670 | 1795 | 2000 | 2125 | 93 | 258 | 587 | 88.7 | 4500 | 0.12 | 2.5 | |
| | | | | | | | 98 | 258 | 587 | 89.1 | | | | |
| | | | | | | | 103 | 258 | 587 | 89.5 | | | | |
| | | | | | | | 110 | 258 | 587 | 90.0 | | | | |
| | | | | | | | 121 | 254 | 576 | 90.7 | | | | |
| | | | | | | | 127 | 251 | 570 | 91.1 | | | | |
| 301-CB ¹ | 1795 | 1900 | 2000 | 2150 | 2400 | 2550 | 115 | 315 | 610 | 90.1 | 1810 | 0.08 | 1.8 | |
| | | | | | | | 116 | 301 | 583 | 90.6 | | | | |
| | | | | | | | 116 | 286 | 553 | 91.0 | | | | |
| | | | | | | | 115 | 266 | 513 | 91.6 | | | | |
| | | | | | | | 115 | 238 | 458 | 92.2 | | | | |
| | | | | | | | 115 | 224 | 431 | 92.4 | | | | |
| 301-BB ^{1*} | 2270 | 2395 | 2520 | 2710 | 3020 | 3200 | 142 | 386 | 598 | 91.3 | 2310 | 0.05 | 1.2 | |
| | | | | | | | 144 | 372 | 576 | 91.6 | | | | |
| | | | | | | | 144 | 354 | 547 | 92.0 | | | | |
| | | | | | | | 144 | 329 | 508 | 92.4 | | | | |
| | | | | | | | 144 | 295 | 454 | 92.9 | | | | |
| | | | | | | | 143 | 278 | 427 | 93.0 | | | | |
| 301-AB ¹ | 3080 | 3230 | 3400 | 3640 | | | 167 | 450 | 521 | 92.5 | 4000 | 0.03 | 0.7 | |
| | | | | | | | 176 | 450 | 521 | 92.8 | | | | |
| | | | | | | | 185 | 450 | 521 | 92.9 | | | | |
| | | | | | | | 198 | 450 | 520 | 93.2 | | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 15% reduction of power.

* Normally kept in stock with reinforced impregnation.

Data subject to change without prior notice.

Technical data

| | n_{max} 4500 min ⁻¹ | n_0 40 min ⁻¹ | J 0.69 kgm ² | P_f 2240 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 1300 m ³ /h | Pr 1250 Pa | $W_{(foot)}$ 470 kg | $W_{(flange)}$ 500 kg | | | | |
|-----------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|--------------------------------------|-----------------|------------------------|--------------------------|-------------------|-------|---------------|-------------|
| Cat. Nr | U_a (V): | 400 | 420 | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 159... | | n_b (min ⁻¹) | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) | |
| 401-NC | 450 | 480 | 510 | 550 | 625 | 670 | 33 | 105 | 688 | 74.8 | 1500 | 0.77 | 17.1 | |
| | | | | | | | 35 | 105 | 688 | 75.8 | | | | |
| | | | | | | | 37 | 105 | 688 | 76.8 | | | | |
| | | | | | | | 40 | 105 | 688 | 78.0 | | | | |
| | | | | | | | 44 | 103 | 676 | 80.0 | | | | |
| | | | | | | | 47 | 102 | 670 | 81.0 | | | | |
| 401-LC | 545 | 580 | 610 | 660 | 745 | 800 | 40 | 125 | 702 | 77.9 | 2210 | 0.55 | 12.6 | |
| | | | | | | | 43 | 125 | 702 | 78.8 | | | | |
| | | | | | | | 45 | 125 | 702 | 79.6 | | | | |
| | | | | | | | 49 | 125 | 702 | 80.7 | | | | |
| | | | | | | | 54 | 123 | 690 | 82.5 | | | | |
| | | | | | | | 57 | 122 | 683 | 83.3 | | | | |
| 401-HC | 680 | 720 | 760 | 820 | 920 | 980 | 51 | 152 | 712 | 81.4 | 2310 | 0.37 | 8.7 | |
| | | | | | | | 54 | 152 | 712 | 82.1 | | | | |
| | | | | | | | 57 | 152 | 712 | 82.8 | | | | |
| | | | | | | | 61 | 152 | 712 | 83.7 | | | | |
| | | | | | | | 68 | 149 | 700 | 85.2 | | | | |
| | | | | | | | 71 | 148 | 693 | 85.9 | | | | |
| 401-GB | 760 | 800 | 845 | 910 | 1020 | 1085 | 53 | 155 | 668 | 83.4 | 1100 | 0.3 | 7.4 | |
| | | | | | | | 56 | 155 | 668 | 84.0 | | | | |
| | | | | | | | 59 | 155 | 668 | 84.6 | | | | |
| | | | | | | | 64 | 155 | 668 | 85.5 | | | | |
| | | | | | | | 70 | 152 | 656 | 86.7 | | | | |
| | | | | | | | 74 | 151 | 649 | 87.3 | | | | |
| 401-FC | 875 | 925 | 975 | 1050 | 1180 | 1255 | 64 | 187 | 701 | 84.3 | 2930 | 0.24 | 5.6 | |
| | | | | | | | 68 | 187 | 701 | 84.9 | | | | |
| | | | | | | | 72 | 187 | 701 | 85.5 | | | | |
| | | | | | | | 77 | 187 | 701 | 86.3 | | | | |
| | | | | | | | 85 | 184 | 688 | 87.4 | | | | |
| | | | | | | | 89 | 182 | 681 | 88.0 | | | | |
| 401-EB | 1000 | 1055 | 1110 | 1200 | 1340 | 1430 | 68 | 194 | 649 | 86.0 | 1300 | 0.19 | 4.5 | |
| | | | | | | | 72 | 194 | 649 | 86.5 | | | | |
| | | | | | | | 76 | 194 | 649 | 87.0 | | | | |
| | | | | | | | 81 | 194 | 649 | 87.6 | | | | |
| | | | | | | | 88 | 189 | 631 | 88.6 | | | | |
| | | | | | | | 88 | 176 | 586 | 89.3 | | | | |
| 401-DC* | 1210 | 1275 | 1340 | 1440 | 1610 | 1710 | 87 | 246 | 691 | 87.5 | 4500 | 0.14 | 3.1 | |
| | | | | | | | 92 | 246 | 691 | 88.0 | | | | |
| | | | | | | | 97 | 246 | 691 | 88.4 | | | | |
| | | | | | | | 104 | 246 | 691 | 89.0 | | | | |
| | | | | | | | 114 | 242 | 679 | 89.8 | | | | |
| | | | | | | | 120 | 239 | 671 | 90.2 | | | | |
| 401-CB' | 1445 | 1525 | 1605 | 1720 | 1925 | 2045 | 101 | 280 | 669 | 89.3 | 1770 | 0.09 | 2.3 | |
| | | | | | | | 107 | 280 | 669 | 89.7 | | | | |
| | | | | | | | 112 | 280 | 669 | 90.0 | | | | |
| | | | | | | | 121 | 280 | 669 | 90.5 | | | | |
| | | | | | | | 124 | 257 | 614 | 91.3 | | | | |
| | | | | | | | 123 | 242 | 576 | 91.6 | | | | |
| 401-BB'* | 1835 | 1930 | 2030 | 2175 | 2425 | 2575 | 126 | 344 | 657 | 90.7 | 2250 | 0.06 | 1.5 | |
| | | | | | | | 133 | 344 | 657 | 91.0 | | | | |
| | | | | | | | 140 | 344 | 657 | 91.3 | | | | |
| | | | | | | | 150 | 344 | 657 | 91.6 | | | | |
| | | | | | | | 155 | 320 | 609 | 92.2 | | | | |
| | | | | | | | 154 | 301 | 572 | 92.5 | | | | |
| 401-AB' | 2470 | 2600 | 2730 | 2930 | 3250 | 3450 | 166 | 450 | 644 | 91.8 | 4000 | 0.04 | 0.8 | |
| | | | | | | | 175 | 450 | 644 | 92.0 | | | | |
| | | | | | | | 184 | 450 | 644 | 92.3 | | | | |
| | | | | | | | 197 | 450 | 643 | 92.5 | | | | |
| | | | | | | | 215 | 442 | 631 | 92.9 | | | | |
| | | | | | | | 225 | 438 | 625 | 93.1 | | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 10% reduction of power.

* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 3800 min ⁻¹ | n_0 40 min ⁻¹ | J 0.81 kgm ² | P_f 2400 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 1500 m ³ /h | Pr 1530 Pa | $W_{(foot)}$ 520 kg | $W_{(flange)}$ 550 kg | | | |
|---------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|--------------------------------------|-----------------|------------------------|--------------------------|-------------------|---------------|-------------|
| Cat. Nr | U_a (V):400 420 | | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 159... | n_b (min ⁻¹) | | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) |
| 501-HC | 570 | 605 | 635 | 690 | 775 | 825 | 49 | 148 | 815 | 79.8 | 1700 | 0.42 | 10.3 |
| | | | | | | | 51 | 148 | 815 | 80.6 | | | |
| | | | | | | | 54 | 148 | 815 | 81.3 | | | |
| | | | | | | | 59 | 148 | 815 | 82.3 | | | |
| | | | | | | | 65 | 146 | 801 | 83.9 | | | |
| | | | | | | | 69 | 144 | 792 | 84.6 | | | |
| 501-GB | 630 | 665 | 705 | 760 | 850 | 910 | 54 | 162 | 820 | 81.3 | 920 | 0.34 | 8.7 |
| | | | | | | | 57 | 162 | 820 | 82.1 | | | |
| | | | | | | | 60 | 162 | 820 | 82.8 | | | |
| | | | | | | | 65 | 162 | 820 | 83.7 | | | |
| | | | | | | | 72 | 159 | 806 | 85.1 | | | |
| | | | | | | | 76 | 158 | 798 | 85.8 | | | |
| 501-FC | 735 | 780 | 820 | 870 | 990 | 1055 | 62 | 181 | 795 | 83.0 | 2450 | 0.27 | 6.6 |
| | | | | | | | 65 | 181 | 795 | 83.6 | | | |
| | | | | | | | 69 | 181 | 795 | 84.3 | | | |
| | | | | | | | 74 | 181 | 795 | 85.1 | | | |
| | | | | | | | 81 | 178 | 783 | 86.3 | | | |
| | | | | | | | 86 | 176 | 775 | 87.0 | | | |
| 501-EB | 835 | 885 | 930 | 1000 | 1125 | 1200 | 70 | 202 | 790 | 84.4 | 1070 | 0.22 | 5.3 |
| | | | | | | | 74 | 202 | 790 | 85.0 | | | |
| | | | | | | | 77 | 202 | 790 | 85.5 | | | |
| | | | | | | | 83 | 202 | 790 | 86.3 | | | |
| | | | | | | | 90 | 194 | 761 | 87.5 | | | |
| | | | | | | | 90 | 181 | 711 | 88.3 | | | |
| 501-DC | 1020 | 1075 | 1130 | 1215 | 1360 | 1445 | 84 | 239 | 789 | 86.5 | 3400 | 0.15 | 3.7 |
| | | | | | | | 89 | 239 | 789 | 87.0 | | | |
| | | | | | | | 94 | 239 | 789 | 87.5 | | | |
| | | | | | | | 100 | 239 | 789 | 88.1 | | | |
| | | | | | | | 110 | 235 | 775 | 89.0 | | | |
| | | | | | | | 116 | 233 | 766 | 89.5 | | | |
| 501-CB ¹ | 1215 | 1280 | 1345 | 1445 | 1620 | 1725 | 104 | 292 | 821 | 88.2 | 1450 | 0.11 | 2.7 |
| | | | | | | | 110 | 292 | 821 | 88.6 | | | |
| | | | | | | | 116 | 292 | 821 | 89.0 | | | |
| | | | | | | | 124 | 292 | 821 | 89.5 | | | |
| | | | | | | | 125 | 263 | 736 | 90.5 | | | |
| | | | | | | | 125 | 247 | 691 | 90.9 | | | |
| 501-BB ¹ | 1545 | 1625 | 1710 | 1835 | 2040 | 2170 | 130 | 358 | 805 | 89.8 | 3000 | 0.07 | 1.7 |
| | | | | | | | 137 | 358 | 805 | 90.1 | | | |
| | | | | | | | 144 | 358 | 805 | 90.4 | | | |
| | | | | | | | 154 | 358 | 805 | 90.9 | | | |
| | | | | | | | 169 | 352 | 790 | 91.6 | | | |
| | | | | | | | 177 | 348 | 781 | 91.9 | | | |
| 501-AB ¹ | 2100 | 2200 | 2320 | 2480 | 2760 | | 166 | 450 | 757 | 91.4 | 3200 | 0.05 | 1 |
| | | | | | | | 175 | 450 | 756 | 91.7 | | | |
| | | | | | | | 183 | 450 | 756 | 91.9 | | | |
| | | | | | | | 196 | 450 | 756 | 92.2 | | | |
| | | | | | | | 214 | 442 | 742 | 92.6 | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 15% reduction of power.

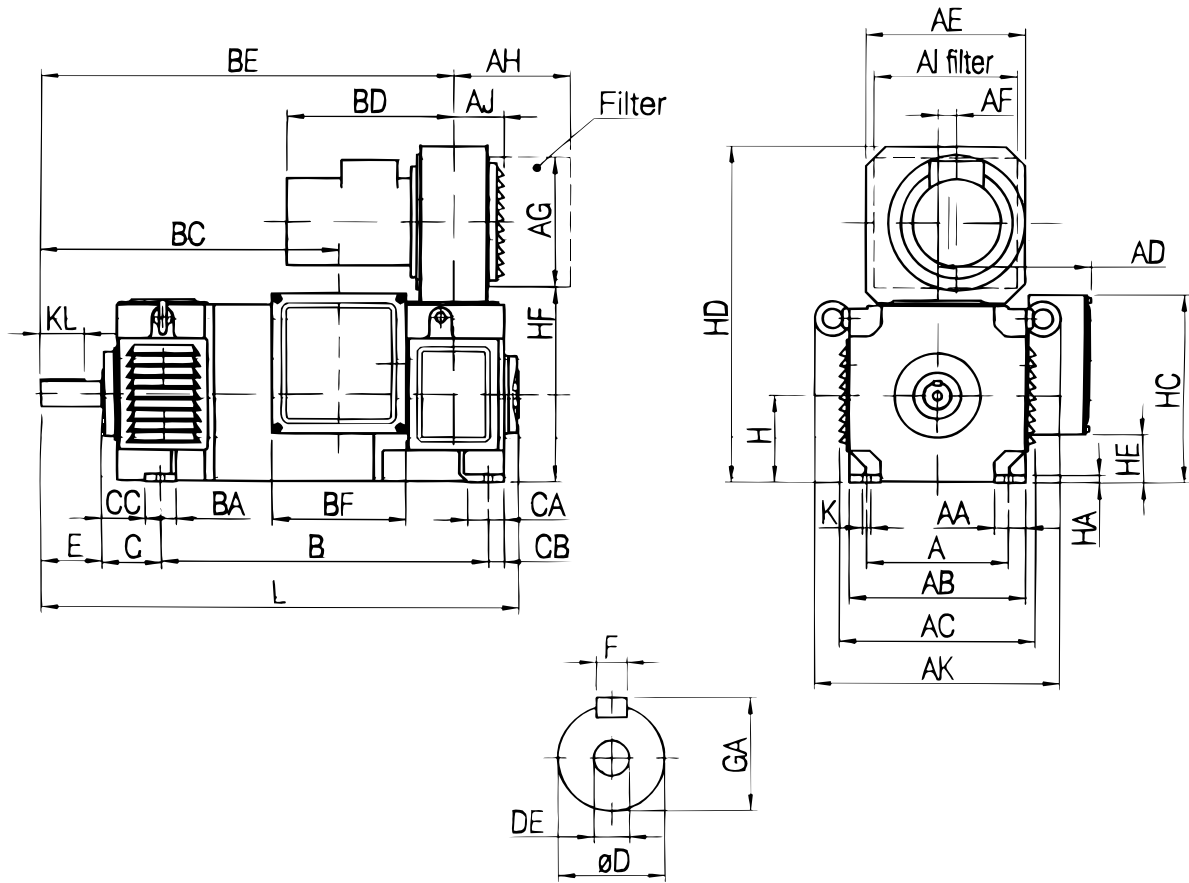
* Normally kept in stock with reinforced impregnation.

Technical data

| | n_{max} 3000 min ⁻¹ | n_0 40 min ⁻¹ | J 1.05 kgm ² | P_f 2650 W | U_{amax} 550 V | U_f 110-440 V | V_{cool} 1900 m ³ /h | Pr 1400 Pa | $W_{(foot)}$ 630 kg | $W_{(flange)}$ 660 kg | | | |
|----------------------|-------------------------------------|-------------------------------|------------------------------|-----------------|---------------------|--------------------|--------------------------------------|-----------------|------------------------|--------------------------|-------------------|---------------|-------------|
| Cat. Nr | U_a (V):400 420 | | 440 | 470 | 520 | 550 | P | I | T | η | n_2 | R_A (115°C) | L_A (0Hz) |
| FR 159... | n_b (min ⁻¹) | | | | | | (kW) | (A) | (Nm) | (%) | min ⁻¹ | (Ω) | (mH) |
| 601-BF | 610 | 650 | 680 | 740 | 830 | 880 | 66 | 194 | 1024 | 82.7 | 1200 | 0.26 | 10.5 |
| | | | | | | | 69 | 194 | 1024 | 83.4 | | | |
| | | | | | | | 73 | 194 | 1024 | 84.0 | | | |
| | | | | | | | 79 | 194 | 1024 | 84.8 | | | |
| | | | | | | | 87 | 194 | 1007 | 86.1 | | | |
| | | | | | | | 92 | 189 | 996 | 86.8 | | | |
| 601-FF | 670 | 710 | 750 | 810 | 910 | 970 | 65 | 196 | 930 | 81.7 | 1050 | 0.29 | 8.5 |
| | | | | | | | 69 | 196 | 930 | 82.4 | | | |
| | | | | | | | 73 | 196 | 930 | 83.0 | | | |
| | | | | | | | 79 | 196 | 930 | 83.9 | | | |
| | | | | | | | 87 | 193 | 914 | 85.3 | | | |
| | | | | | | | 86 | 191 | 904 | 86.0 | | | |
| 601-EF | 770 | 810 | 860 | 920 | 1040 | 1100 | 75 | 220 | 928 | 83.3 | 1200 | 0.22 | 6.8 |
| | | | | | | | 79 | 220 | 928 | 83.9 | | | |
| | | | | | | | 83 | 220 | 927 | 84.5 | | | |
| | | | | | | | 90 | 220 | 927 | 85.3 | | | |
| | | | | | | | 99 | 216 | 911 | 86.5 | | | |
| | | | | | | | 104 | 214 | 902 | 87.1 | | | |
| 601-BD | 880 | 930 | 980 | 1050 | 1170 | 1250 | 90 | 255 | 977 | 86.6 | 1800 | 0.14 | 5.6 |
| | | | | | | | 95 | 255 | 977 | 87.1 | | | |
| | | | | | | | 100 | 255 | 977 | 87.6 | | | |
| | | | | | | | 108 | 255 | 977 | 88.2 | | | |
| | | | | | | | 118 | 251 | 960 | 89.1 | | | |
| | | | | | | | 124 | 248 | 950 | 89.6 | | | |
| 601-DF | 890 | 940 | 990 | 1070 | 1200 | 1270 | 86 | 249 | 918 | 84.7 | 1400 | 0.18 | 5.2 |
| | | | | | | | 91 | 249 | 918 | 85.3 | | | |
| | | | | | | | 95 | 249 | 918 | 85.8 | | | |
| | | | | | | | 103 | 249 | 918 | 86.5 | | | |
| | | | | | | | 113 | 245 | 902 | 87.6 | | | |
| | | | | | | | 119 | 242 | 892 | 88.1 | | | |
| 601-CF | 1060 | 1120 | 1180 | 1270 | 1410 | 1500 | 103 | 294 | 929 | 86.5 | 1700 | 0.13 | 3.8 |
| | | | | | | | 109 | 294 | 929 | 87.0 | | | |
| | | | | | | | 115 | 294 | 929 | 87.4 | | | |
| | | | | | | | 123 | 294 | 929 | 88.0 | | | |
| | | | | | | | 135 | 289 | 913 | 88.9 | | | |
| | | | | | | | 142 | 286 | 903 | 89.4 | | | |
| 601-AF ^{1*} | 1310 | 1380 | 1450 | 1560 | 1740 | 1840 | 143 | 394 | 1039 | 89.7 | 2500 | 0.06 | 2.6 |
| | | | | | | | 151 | 394 | 1039 | 90.1 | | | |
| | | | | | | | 158 | 394 | 1039 | 90.4 | | | |
| | | | | | | | 170 | 394 | 1039 | 90.8 | | | |
| | | | | | | | 186 | 387 | 1021 | 91.4 | | | |
| | | | | | | | 195 | 383 | 1010 | 91.8 | | | |
| 601-AD ^{1*} | 1850 | 1940 | 2040 | 2190 | 2430 | 2580 | 175 | 474 | 905 | 91.4 | 2800 | 0.05 | 1.4 |
| | | | | | | | 184 | 474 | 905 | 91.7 | | | |
| | | | | | | | 193 | 474 | 904 | 91.9 | | | |
| | | | | | | | 207 | 474 | 904 | 92.2 | | | |
| | | | | | | | 226 | 466 | 888 | 92.6 | | | |
| | | | | | | | 237 | 461 | 878 | 92.8 | | | |

1 Cooling air inlet at commutator side. Can be used with cooling air inlet at shaft side with 15% reduction of power.

* Normally kept in stock with reinforced impregnation.

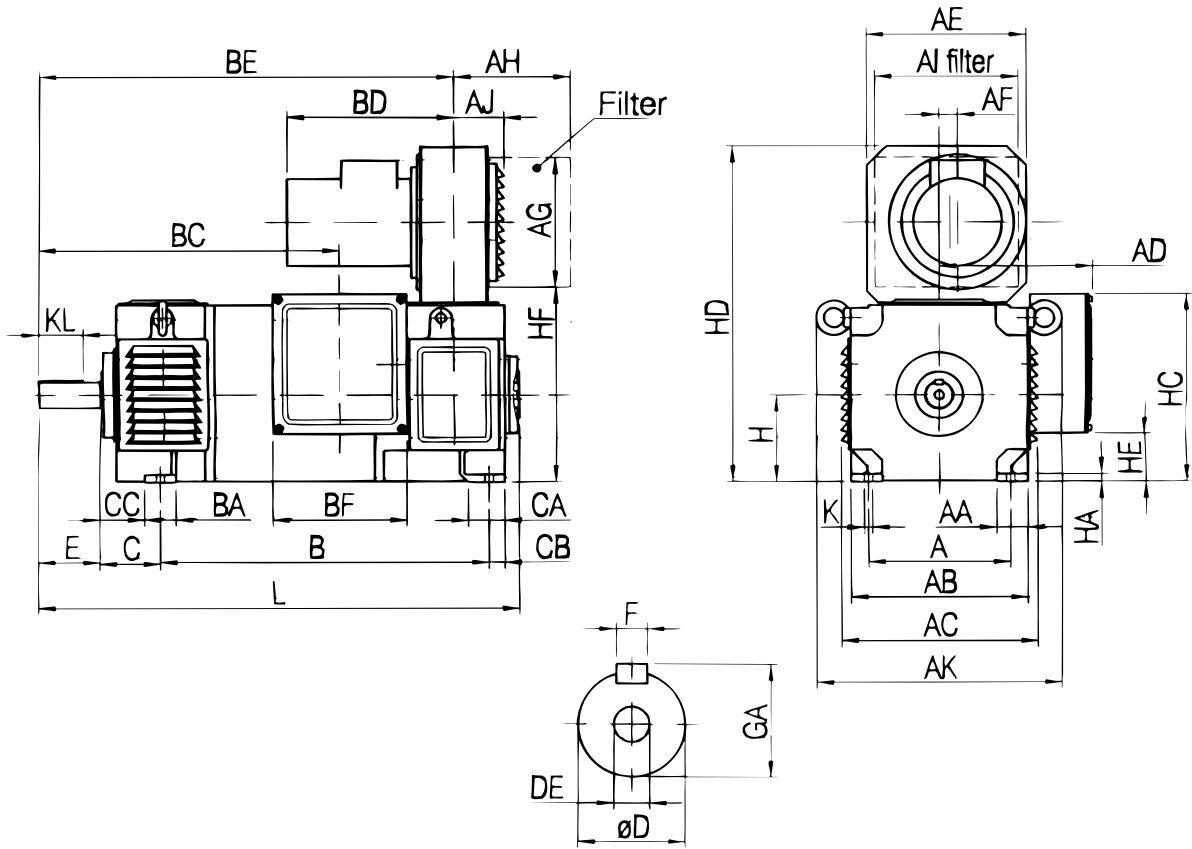


Dimensions in mm

| DMP | A | AA | AB | AC | AD | AE | AF | AG | AH | AI | AJ | AK | B | BA | BC | BD | BE | BF |
|---------|-----|------|-----|-----|-----|-----|------|-----|-----|-----|----|-----|-----|----|-----|-----|-----|-----|
| 112-2MA | 190 | 45 | 220 | 256 | 203 | 220 | 17 | 195 | 175 | 195 | 77 | 326 | 373 | 50 | 336 | 235 | 514 | 190 |
| 112-2LA | | | | | | | | | | | | | 428 | | 391 | | 569 | |
| 112-4M | | | | | | | | | | | | | 373 | | 336 | | 514 | |
| 112-4L | | | | | | | | | | | | | 428 | | 391 | | 569 | |
| 132-2M | 216 | 47.5 | 260 | 295 | 223 | 220 | 17 | 195 | 175 | 195 | 77 | 366 | 482 | 50 | 419 | 335 | 590 | 190 |
| 132-4S | | | | | | 220 | 17 | 195 | 175 | 195 | 77 | | 437 | | 374 | 335 | 545 | |
| 132-4M | | | | | | 220 | 17 | 195 | 175 | 195 | 77 | | 482 | | 419 | 335 | 590 | |
| 132-4L | | | | | | 220 | 17 | 195 | 175 | 195 | 77 | | 532 | | 469 | 335 | 640 | |
| 132-4LB | | | | | | 285 | 33.5 | 235 | 208 | 235 | 89 | | 642 | | 609 | 298 | 780 | |

| DMP | C | CA | CB | CC | D | DE | E | F | GA | H | HA | HC | HD | HE | HF | K | KL | L | L+REO444R1 | L+TDP0.2LT | W (kg) |
|---------|----|----|----|----|----|-----|-----|----|----|-----|----|-----|-----|----|-----|----|----|-------|------------|------------|--------|
| 112-2MA | 70 | 55 | 25 | 45 | 38 | M10 | 80 | 10 | 41 | 112 | 10 | 241 | 451 | 66 | 250 | 12 | 60 | 594.5 | 805.5 | 811.5 | 97 |
| 112-2LA | | | | | | | | | | | | | | | | | | 649.5 | 860.5 | 866.5 | 103 |
| 112-4M | | | | | | | | | | | | | | | | | | 594.5 | 805.5 | 811.5 | 110 |
| 112-4L | | | | | | | | | | | | | | | | | | 649.5 | 860.5 | 866.5 | 117 |
| 132-2M | 89 | 60 | 25 | 64 | 38 | M10 | 80 | 10 | 41 | 132 | 12 | 261 | 491 | 86 | 290 | 12 | 60 | 695.5 | 906.5 | 912.5 | 139 |
| 132-4S | | | | | 38 | | 80 | 10 | 41 | | | | | | | | 60 | 650.5 | 861.5 | 867.5 | 122 |
| 132-4M | | | | | 38 | | 80 | 10 | 41 | | | | | | | | 60 | 695.5 | 906.5 | 912.5 | 152 |
| 132-4L | | | | | 38 | | 80 | 10 | 41 | | | | | | | | 60 | 745.5 | 956.5 | 962.5 | 177 |
| 132-4LB | | | | | 42 | | 110 | 12 | 45 | | | | | | | | 80 | 885 | 1096 | 1102 | 236 |

Dimensions are not binding

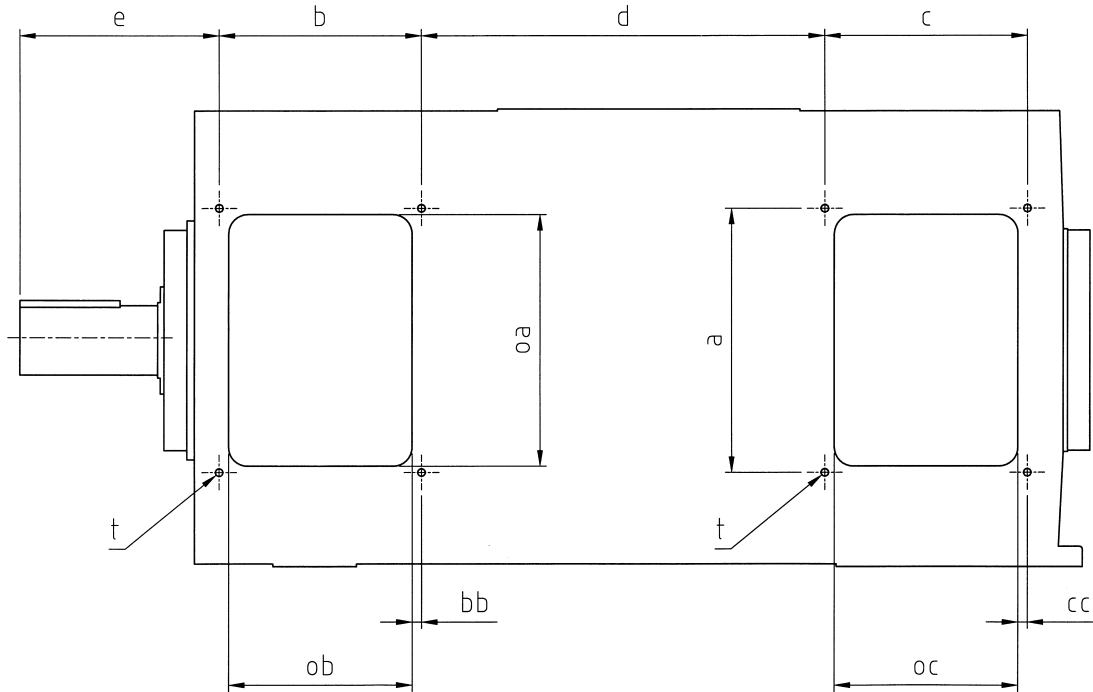


Dimensions in mm

| DMP | A | AA | AB | AC | AD | AE | AF | AG | AH | AI | AJ | AK | B | BA | BC | BD | BE | BF |
|-----------|-----|----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|----|-------|-----|------|-----|
| 160-4S/SO | 254 | 56 | 316 | 351 | 274 | 285 | 33.5 | 235 | 208 | 235 | 89 | 439 | 475 | 56 | 426 | 298 | 631 | 240 |
| 160-4M/MO | | | | | | 285 | 33.5 | 235 | 208 | 235 | 89 | | 522 | | 473 | 298 | 678 | |
| 160-4L/LO | | | | | | 285 | 33.5 | 235 | 208 | 235 | 89 | | 587 | | 538 | 298 | 743 | |
| 160-4LB | | | | | | 315 | 21.5 | 300 | 208 | 300 | 80 | | 712 | | 663.5 | 299 | 868 | |
| 180-4A | 279 | 66 | 356 | 391 | 294 | 355 | 25.5 | 340 | 265 | 340 | 95 | 479 | 561 | 66 | 499 | 305 | 718 | 240 |
| 180-4B | | 66 | | | 294 | 355 | 25.5 | | 265 | | 95 | | 612 | 66 | 535 | 305 | 754 | |
| 180-4C | | 66 | | | 294 | 355 | 25.5 | | 265 | | 95 | | 677 | 66 | 616 | 305 | 835 | |
| 180-4D | | 66 | | | 294 | 355 | 25.5 | | 265 | | 95 | | 707 | 66 | 681 | 305 | 900 | |
| 180-4E | | 61 | | | 294 | 405 | 28.5 | | 270 | | 105 | | 720 | 66 | 741 | 349 | 960 | |
| 180-4F | | 61 | | | 392 | 405 | 28.5 | | 270 | | 105 | | 795 | 85 | 821 | 349 | 1071 | |

| DMP | C | CA | CB | CC | D | DE | E | F | GA | H | HA | HC | HD | HE | HF | K | KL | L | L+REO44R1 | L+TDP0.2LT | W (kg) |
|-----------|-----|-----|----|----|----|-----|-----|----|------|-----|----|-------|-----|-------|-----|----|-----|--------|-----------|------------|---------|
| 160-4S/SO | 108 | 65 | 28 | 80 | 48 | M16 | 110 | 14 | 51.5 | 160 | 14 | 343.5 | 611 | 88.5 | 356 | 15 | 80 | 744 | 955 | 961 | 206/216 |
| 160-4M/MO | | | | | | | | | | | | | 611 | | 356 | | | 791 | 1002 | 1008 | 246/256 |
| 160-4L/LO | | | | | | | | | | | | | 611 | | 356 | | | 856 | 1067 | 1073 | 291/301 |
| 160-4LB | | | | | | | | | | | | | 641 | | 338 | | | 981 | 1192 | 1198 | 398 |
| 180-4A | 121 | 195 | 50 | 91 | 55 | M16 | 110 | 16 | 59 | 180 | 18 | 364 | 745 | 109 | 402 | 15 | 80 | 848.5 | 1059.5 | 1065.5 | 308 |
| 180-4B | | 195 | 35 | | 55 | M16 | 110 | 16 | 59 | | 18 | 364 | 745 | 109 | 402 | 15 | 80 | 884.5 | 1095.5 | 1101.5 | 348 |
| 180-4C | | 195 | 21 | | 60 | M16 | 140 | 18 | 64 | | 18 | 364 | 745 | 109 | 402 | 15 | 110 | 965.5 | 1176.5 | 1182.5 | 398 |
| 180-4D | | 195 | 43 | | 70 | M20 | 140 | 20 | 74.5 | | 18 | 364 | 745 | 109 | 402 | 15 | 110 | 1030.5 | 1241.5 | 1247.5 | 488 |
| 180-4E | | 195 | 28 | | 70 | M20 | 140 | 20 | 74.5 | | 18 | 364 | 815 | 109 | 448 | 15 | 110 | 1190.5 | 1301.5 | 1307.5 | 540 |
| 180-4F | | 95 | 40 | | 70 | M20 | 140 | 20 | 74.5 | | 18 | 372.5 | 815 | 117.5 | 444 | 19 | 110 | 1248 | 1459 | 1465 | 650 |

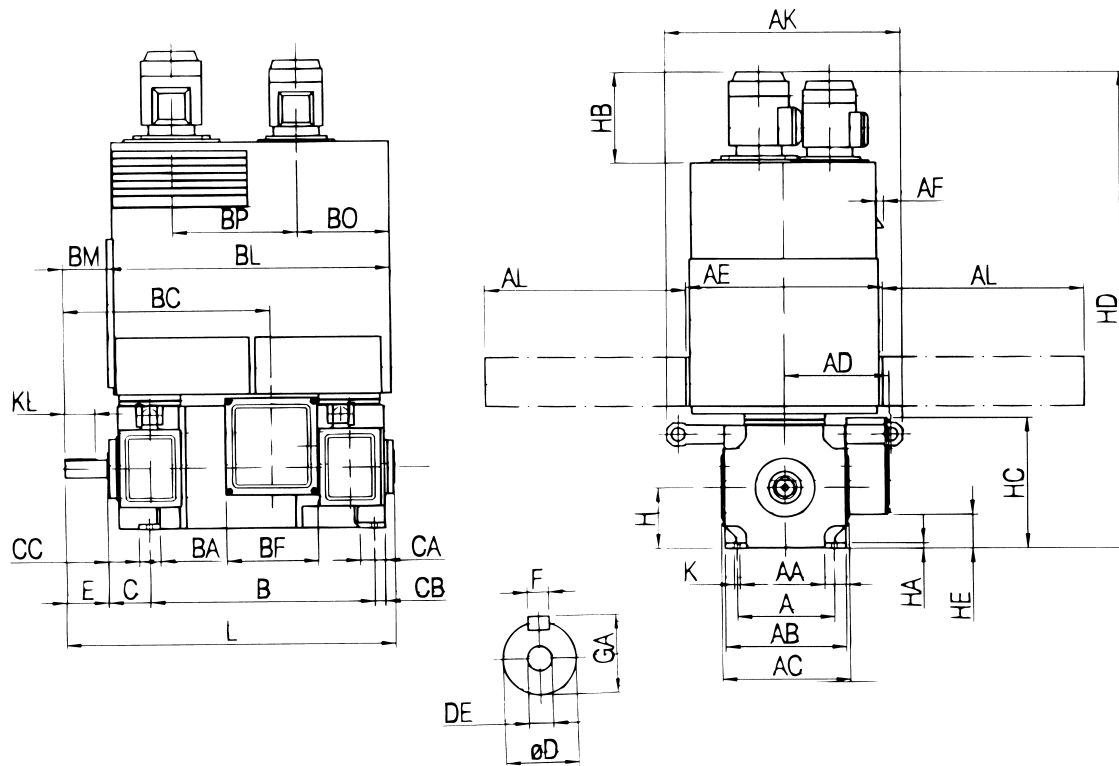
Dimensions are not binding



Dimensions in mm

| DMP | a | b | bb | c | cc | d | e | oa | ob | oc | t | W (kg) |
|-----------|-----|-----|-----|-----|-----|-----|-------|-----|-----|-----|----|---------|
| 112-2MA | 110 | 110 | 5 | 110 | 5 | 245 | 104 | 110 | 100 | 100 | M6 | 90 |
| 112-2LA | | | | | | 300 | | | | | | 96 |
| 112-4M | | | | | | 245 | | | | | | 103 |
| 112-4L | | | | | | 300 | | | | | | 110 |
| 132-2M | 150 | 125 | 7.5 | 125 | 7.5 | 286 | 116.5 | 145 | 110 | 110 | M6 | 132 |
| 132-4S | | | | | | 241 | 116.5 | | | | | 115 |
| 132-4M | | | | | | 286 | 116.5 | | | | | 145 |
| 132-4L | | | | | | 336 | 116.5 | | | | | 170 |
| 132-4LB | | | | | | 446 | 146.5 | | | | | 220 |
| 160-4S/MO | 190 | 145 | 7.5 | 145 | 7.5 | 263 | 150 | 180 | 130 | 130 | M6 | 190/200 |
| 160-4M/MO | | | | | | 310 | | | | | | 230/240 |
| 160-4L/LO | | | | | | 375 | | | | | | 275/285 |
| 160-4LB | | | | | | 500 | | | | | | 380 |
| 180-4A | 210 | 160 | 7.5 | 160 | 7.5 | 320 | 158.5 | 200 | 145 | 145 | M8 | 290 |
| 180-4B | | | 7.5 | | 7.5 | 356 | 158.5 | 200 | 145 | 145 | | 330 |
| 180-4C | | | 7.5 | | 7.5 | 407 | 188.5 | 200 | 145 | 145 | | 380 |
| 180-4D | | | 7.5 | | 7.5 | 472 | 188.5 | 200 | 145 | 145 | | 470 |
| 180-4E | | | 7.5 | | 7.5 | 532 | 188.5 | 200 | 145 | 145 | | 520 |
| 180-4F | | | 10 | | 10 | 660 | 171 | 210 | 140 | 155 | | 630 |

Dimensions are not binding

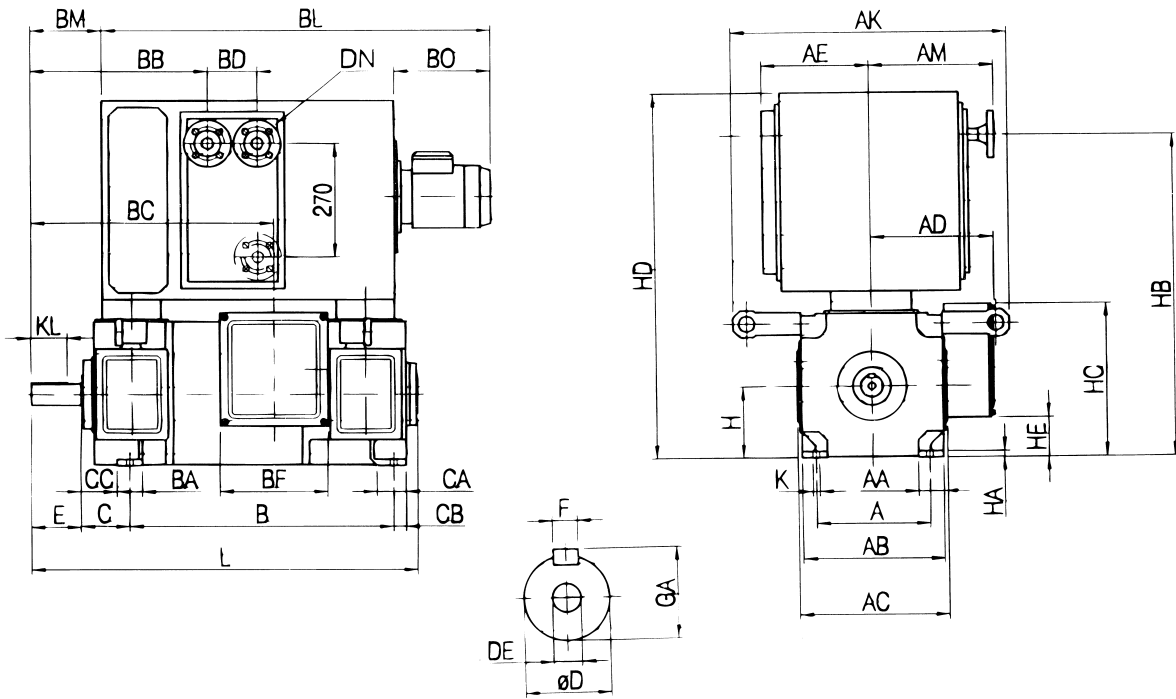


Dimensions in mm

| DMP | A | AA | AB | AC | AD | AE | AF | AK | AL | B | BA | BC | BF | BL | BM | BP | BO | C |
|-----------|-----|------|-----|-----|-----|-----|----|-----|-------|-----|-----|-----|-----|------|-------|-----|-----|-----|
| 132-2M | 216 | 47.5 | 260 | 279 | 223 | 390 | 20 | 440 | 390 | 482 | 50 | 419 | 190 | 647 | 91 | 290 | 223 | 89 |
| 132-4S | | | | | | | | | | 437 | | 374 | | 647 | 91 | 290 | 223 | |
| 132-4M | | | | | | | | | | 482 | | 419 | | 647 | 91 | 290 | 223 | |
| 132-4L | | | | | | | | | | 532 | | 469 | | 647 | 91 | 290 | 223 | |
| 132-4LB | | | | | | | | | | 642 | | 609 | | 772 | 121 | 400 | 238 | |
| 160-4S/SO | 254 | 56 | 316 | 335 | 274 | 515 | 20 | 616 | 527.5 | 475 | 426 | 240 | 723 | 115 | 325 | 240 | 108 | |
| 160-4M/MO | | | | | | | | | 527.5 | 522 | 473 | | 723 | | 325 | 240 | | |
| 160-4L/LO | | | | | | | | | 527.5 | 587 | 538 | | 723 | | 325 | 240 | | |
| 160-4LB | | | | | | | | | 597 | 712 | 663 | | 843 | | 320 | 278 | | |
| 180-4A | 279 | 66 | 356 | 375 | 294 | 606 | 20 | 656 | 600 | 561 | 66 | 499 | 240 | 843 | 126.5 | 320 | 278 | 121 |
| 180-4B | | 66 | | | 294 | 606 | | | 600 | 612 | 66 | 535 | | 843 | 126.5 | 320 | 278 | |
| 180-4C | | 66 | | | 294 | 606 | | | 600 | 677 | 66 | 616 | | 843 | 156.5 | 320 | 278 | |
| 180-4D | | 66 | | | 294 | 606 | | | 600 | 707 | 66 | 681 | | 843 | 156.5 | 320 | 278 | |
| 180-4E | | 66 | | | 294 | 720 | | | 740 | 720 | 66 | 741 | | 1047 | 149 | 500 | 337 | |
| 180-4F | | 61 | | | 322 | 720 | | | 740 | 795 | 85 | 821 | | 1047 | 131 | 500 | 337 | |

| DMP | CA | CB | CC | D | DE | E | F | GA | H | HA | HB | HC | HD | HE | K | KL | L | W (kg) |
|-----------|-----|----|----|----|-----|-----|----|------|-----|----|-----|-------|------|-------|----|-----|--------|--------|
| 132-2M | 60 | 25 | 64 | 38 | M10 | 80 | 10 | 41 | 132 | 12 | 215 | 261 | 1089 | 86 | 12 | 60 | 695.5 | 212 |
| 132-4S | | | | 38 | | 80 | 10 | 41 | | | | | | | | 60 | 650.5 | 205 |
| 132-4M | | | | 38 | | 80 | 10 | 41 | | | | | | | | 60 | 695.5 | 225 |
| 132-4L | | | | 38 | | 80 | 10 | 41 | | | | | | | | 60 | 745.5 | 250 |
| 132-4LB | | | | 42 | | 110 | 12 | 45 | | | | | | | | 80 | 885 | 310 |
| 160-4S/SO | 65 | 28 | 80 | 48 | M16 | 110 | 14 | 51.5 | 160 | 14 | 215 | 343.5 | 1259 | 88.5 | 15 | 80 | 744 | 310 |
| 160-4M/MO | | | | | | | | | | | 215 | | 1259 | | | 791 | 340 | |
| 160-4L/LO | | | | | | | | | | | 215 | | 1259 | | | 856 | 385 | |
| 160-4LB | | | | | | | | | | | 240 | | 1334 | | | 981 | 500 | |
| 180-4A | 195 | 50 | 91 | 55 | M16 | 110 | 16 | 59 | 180 | 18 | 240 | 364 | 1356 | 109 | 15 | 80 | 848.5 | 525 |
| 180-4B | 195 | 35 | | 55 | M16 | 110 | 16 | 59 | | 18 | 240 | 364 | 1356 | 109 | 15 | 80 | 884.5 | 555 |
| 180-4C | 195 | 21 | | 60 | M16 | 140 | 18 | 64 | | 18 | 240 | 364 | 1356 | 109 | 15 | 110 | 965.5 | 615 |
| 180-4D | 195 | 43 | | 70 | M20 | 140 | 20 | 74.5 | | 18 | 240 | 364 | 1356 | 109 | 15 | 110 | 1030.5 | 645 |
| 180-4E | 195 | 28 | | 70 | M20 | 140 | 20 | 74.5 | | 18 | 280 | 364 | 1451 | 109 | 15 | 110 | 1090.5 | 725 |
| 180-4F | 95 | 40 | | 70 | M20 | 140 | 20 | 74.5 | | 16 | 280 | 372.5 | 1451 | 117.5 | 19 | 110 | 1248 | 820 |

Dimensions are not binding

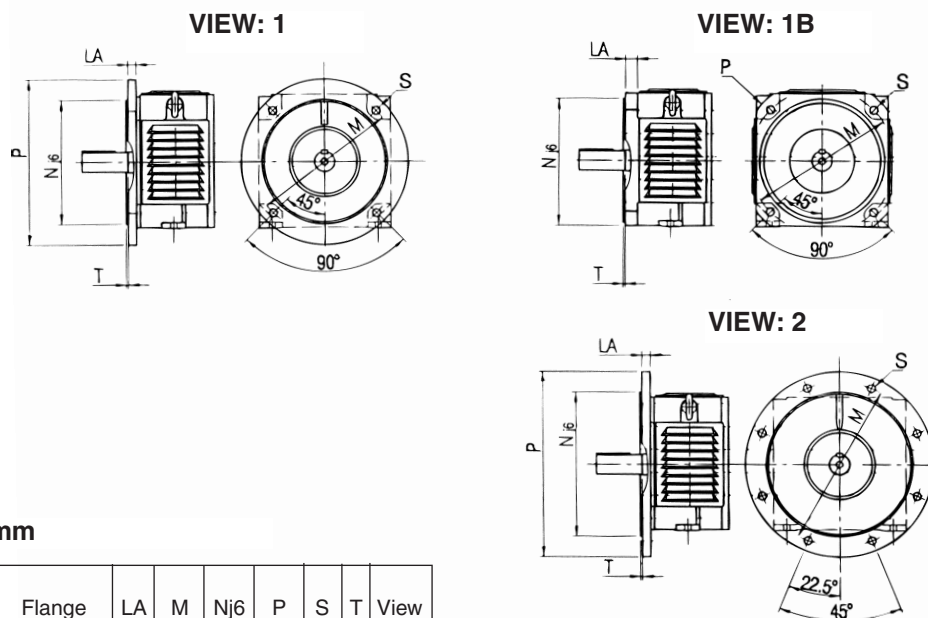


Dimensions in mm

| DMP | A | AA | AB | AC | AD | AE | AK | AM | B | BA | BB | BC | BD | BF | BL | BM | BO | C |
|-----------|-----|------|-----|-----|-----|-----|-----|-----|-----|----|-------|-----|-----|-----|------|-------|-----|-----|
| 132-2M | 216 | 47.5 | 260 | 279 | 223 | 195 | 440 | 230 | 482 | 50 | 314 | 419 | 110 | 190 | 791 | 99 | 220 | 89 |
| 132-4S | | | | | | | | | 437 | | 314 | 374 | | | 746 | 99 | | |
| 132-4M | | | | | | | | | 482 | | 314 | 419 | | | 791 | 99 | | |
| 132-4L | | | | | | | | | 532 | | 314 | 469 | | | 841 | 99 | | |
| 132-4LB | | | | | | | | | 642 | | 344 | 609 | | | 951 | 129 | | |
| 160-4S/SO | 254 | 56 | 316 | 335 | 274 | 240 | 616 | 278 | 475 | 56 | 393 | 426 | 110 | 240 | 753 | 158 | 215 | 108 |
| 160-4M/MO | | | | | | | | | 522 | | | 473 | | | 800 | | | |
| 160-4L/LO | | | | | | | | | 587 | | | 538 | | | 865 | | | |
| 160-4LB | | | | | | | | | 712 | | | 663 | | | 990 | | | |
| 180-4A | 279 | 66 | 356 | 375 | 294 | 295 | 656 | 328 | 561 | 66 | 453.5 | 499 | 110 | 240 | 860 | 168.5 | 240 | 121 |
| 180-4B | | 66 | | | 294 | 295 | | 328 | 612 | 66 | 453.5 | 535 | 110 | | 896 | 168.5 | 240 | |
| 180-4C | | 66 | | | 294 | 295 | | 328 | 677 | 66 | 483.5 | 616 | 110 | | 947 | 198.5 | 240 | |
| 180-4D | | 66 | | | 294 | 295 | | 328 | 707 | 66 | 483.5 | 681 | 110 | | 1012 | 198.5 | 240 | |
| 180-4E | | 66 | | | 294 | 292 | | 337 | 720 | 66 | 542.5 | 741 | 142 | | 1112 | 198.5 | 280 | |
| 180-4F | | 61 | | | 322 | 292 | | 337 | 795 | 85 | 525 | 821 | 142 | | 1240 | 181 | 280 | |

| DMP | CA | CB | CC | D | DE | DN | E | F | GA | H | HA | HB | HC | HD | HE | K | KL | L | W (kg) | |
|-----------|-----|----|----|----|-----|----|-----|----|------|-----|----|-----|-------|-----|-------|----|-----|--------|--------|-----|
| 132-2M | 60 | 25 | 64 | 38 | M10 | 20 | 80 | 10 | 41 | 132 | 12 | 599 | 261 | 719 | 86 | 12 | 80 | 60 | 695.5 | 220 |
| 132-4S | | | | 38 | | | 80 | 10 | 41 | | | | | | | | | 60 | 650.5 | 200 |
| 132-4M | | | | 38 | | | 80 | 10 | 41 | | | | | | | | | 60 | 695.5 | 235 |
| 132-4L | | | | 38 | | | 80 | 10 | 41 | | | | | | | | | 60 | 745.5 | 260 |
| 132-4LB | | | | 42 | | | 110 | 12 | 45 | | | | | | | | | 80 | 885.5 | 330 |
| 160-4S/SO | 65 | 28 | 80 | 48 | M16 | 20 | 110 | 14 | 51.5 | 160 | 14 | 723 | 343.5 | 819 | 88.5 | 15 | 80 | 744 | 310 | |
| 160-4M/MO | | | | | | | | | | | | | | | | | | 791 | 340 | |
| 160-4L/LO | | | | | | | | | | | | | | | | | | 856 | 400 | |
| 160-4LB | | | | | | | | | | | | | | | | | | 981 | 500 | |
| 180-4A | 195 | 50 | 91 | 55 | M16 | 20 | 110 | 16 | 59 | 180 | 18 | 761 | 364 | 857 | 109 | 15 | 80 | 848.5 | 410 | |
| 180-4B | 195 | 35 | | 55 | M16 | 20 | 110 | 16 | 59 | | 18 | 761 | 364 | 857 | 109 | 15 | 80 | 884.5 | 460 | |
| 180-4C | 195 | 21 | | 60 | M16 | 20 | 140 | 18 | 64 | | 18 | 761 | 364 | 857 | 109 | 15 | 110 | 965.5 | 510 | |
| 180-4D | 195 | 43 | | 70 | M20 | 20 | 140 | 20 | 74.5 | | 18 | 761 | 364 | 857 | 109 | 15 | 110 | 1030.5 | 600 | |
| 180-4E | 195 | 28 | | 70 | M20 | 25 | 140 | 20 | 74.5 | | 18 | 769 | 364 | 867 | 109 | 15 | 110 | 1090.5 | 660 | |
| 180-4F | 95 | 40 | | 70 | M20 | 25 | 140 | 20 | 74.5 | | 16 | 769 | 372.5 | 867 | 117.5 | 19 | 110 | 1248 | 790 | |

Dimensions are not binding



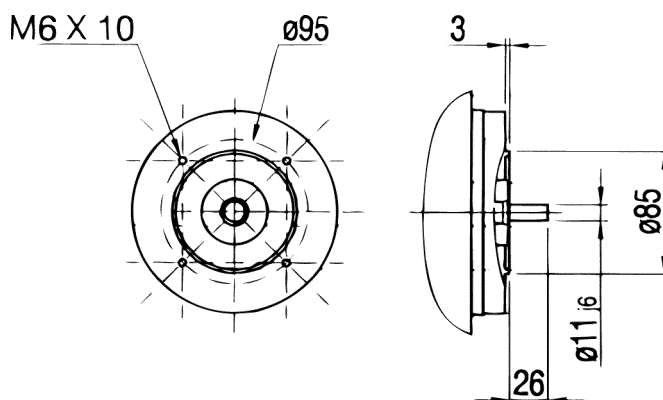
Dimensions in mm

| DMP | Flange | LA | M | Nj6 | P | S | T | View |
|----------------|--------|----|-----|-----|-----|----|---|------|
| 112 | F215 | 14 | 215 | 180 | 250 | 15 | 4 | 1B |
| | F265 | 14 | 265 | 230 | 300 | 15 | 4 | 1B |
| 132 | F265 | 17 | 265 | 230 | 300 | 15 | 4 | 1B |
| | F300 | 17 | 300 | 250 | 350 | 19 | 5 | 1B |
| 160 | F350 | 20 | 350 | 300 | 400 | 19 | 5 | 1B |
| 180-4A/B/C/D/E | F300 | 41 | 300 | 250 | 350 | 19 | 5 | 1 |
| | F350 | 17 | 350 | 300 | 400 | 19 | 5 | 1B |
| | F400 | 17 | 400 | 350 | 450 | 19 | 5 | 2B |
| | F500 | 20 | 500 | 450 | 550 | 19 | 5 | 2 |
| 180-4F | F300 | 41 | 300 | 250 | 350 | 19 | 5 | 1 |
| | F500 | 20 | 500 | 450 | 550 | 19 | 5 | 2 |

Other dimensions on request

Dimension drawing, DMP

tachometer flange



Dimensions are not binding



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