

Technische Daten – Technical data

motorische S1-Daten - motor operation S1

Bemessung - rating 1.500 rpm - 440 V

| Motor-Typ EFG | Bemessungs- leistung | Bemessungs- drehzahl | max. Drehzahl | Bemessungs- moment | Massenträgheits- moment | Masse |
|---------------------------|-------------------------|-------------------------|-----------------------|-------------------------|------------------------------|---------------|
| <i>motor type EFG</i> | <i>rated power</i> | <i>rated speed</i> | <i>max. speed</i> | <i>rated torque</i> | <i>moment of inertia</i> | <i>weight</i> |
| | [kW] | [rpm] | [rpm] | [Nm] | [kgm ²] | [kg] |
| EF 100 S | 4,4 | 1.500 | 3.000 | 28 | ~ 0,013 | 55 |
| EF 100 M | 6,2 | 1.500 | 3.000 | 39 | ~ 0,016 | 66 |
| EF 100 L | 7,5 | 1.500 | 3.000 | 48 | ~ 0,020 | 76 |
| EF 112 L | 9,4 | 1.500 | 3.000 | 60 | ~ 0,038 | 85 |
| EF 132 S | 15,5 | 1.500 | 3.000 | 99 | ~ 0,085 | 120 |
| EF 132 M | 18,5 | 1.500 | 3.000 | 118 | ~ 0,11 | 135 |
| EF 132 L | 25,3 | 1.500 | 3.000 | 161 | ~ 0,14 | 155 |
| EF 160 S | 42,3 | 1.500 | 3.000 | 269 | ~ 0,21 | 230 |
| EF 160 M | 49,5 | 1.500 | 3.000 | 315 | ~ 0,23 | 250 |
| EF 160 L | 58 | 1.500 | 3.000 | 369 | ~ 0,25 | 275 |
| EF 160 X | 65 | 1.500 | 3.000 | 414 | ~ 0,27 | 335 |
| EF 180 S | 52,4 | 1.500 | 3.000 | 334 | ~ 0,40 | 310 |
| EF 180 M | 59,5 | 1.500 | 3.000 | 379 | ~ 0,45 | 340 |
| EF 180 L | 77 | 1.500 | 3.000 | 490 | ~ 0,50 | 385 |
| EF 180 X | 90 | 1.500 | 3.000 | 573 | ~ 0,56 | 430 |
| EF 180 XL | 112 | 1.500 | 3.000 | 713 | ~ 0,61 | 510 |
| EF 200 S | 87,4 | 1.500 | 3.000 | 556 | ~ 0,76 | 430 |
| EF 200 M | 95,5 | 1.500 | 3.000 | 608 | ~ 0,83 | 480 |
| EF 200 L | 117 | 1.500 | 3.000 | 745 | ~ 0,93 | 545 |
| EF 200 X | 134 | 1.500 | 3.000 | 853 | ~ 1,05 | 615 |
| EF 200 XL | 174 | 1.500 | 3.000 | 1.108 | ~ 1,20 | 755 |
| EF 225 S | 133,5 | 1.500 | 3.000 | 850 | ~ 1,50 | 620 |
| EF 225 M | 138,6 | 1.500 | 3.000 | 882 | ~ 1,75 | 690 |
| EF 225 L | 167 | 1.500 | 3.000 | 1.063 | ~ 1,95 | 765 |
| EF 225 X | 205 | 1.500 | 3.000 | 1.305 | ~ 2,20 | 840 |
| EF 225 XL | 236 | 1.500 | 2.000 | 1.503 | ~ 2,45 | 985 |
| EF 250 S | 178 | 1.500 | 3.000 | 1.133 | ~ 2,75 | 865 |
| EF 250 M | 202,7 | 1.500 | 3.000 | 1.291 | ~ 2,95 | 935 |
| EF 250 L | 260 | 1.500 | 3.000 | 1.655 | ~ 3,25 | 1.020 |
| EF 250 X | 295 | 1.500 | 2.500 | 1.878 | ~3,50 | 1.130 |
| EF 250 XL | 360 | 1.500 | 2.400 | 2.292 | ~ 4,10 | 1.320 |
| EF 280 L | 420 | 1.500 | 2.000 | 2.674 | ~ 5,10 | 1.400 |
| EF 280 X | 480 | 1.500 | 1.800 | 3.056 | ~ 5,90 | 1.600 |
| EF 280 XL | 345 | 1.000 | | 3.295 | ~ 6,70 | 1.750 |

Standard Ausführung – Standard design

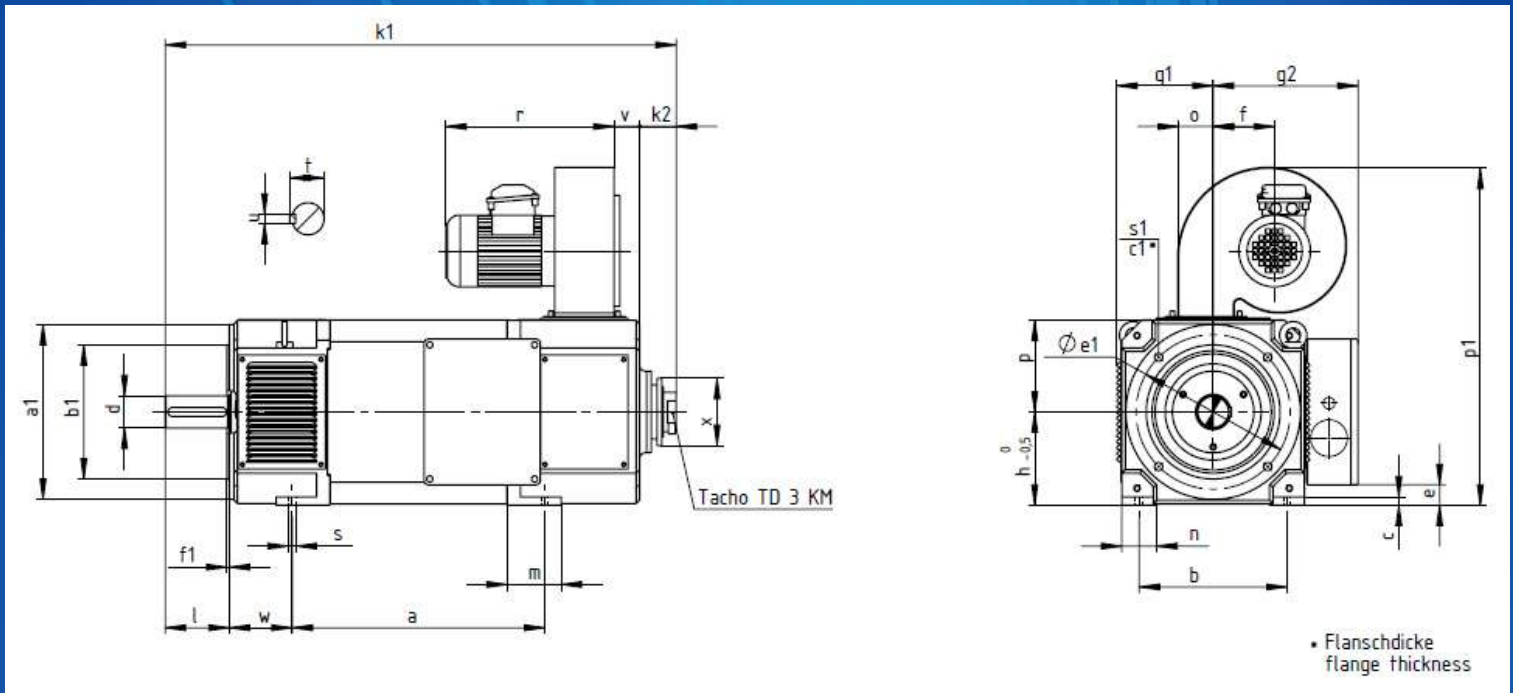
| | |
|-----------------------------|---|
| Kühlart | IC 06 durchzugsbelüftet |
| Schutzart | IP 23 S nach DIN EN 60034-5 |
| Lüfteranbau | B-seitig oben mit Kastenfilter |
| Bauform | IM 1001 |
| Klemmkasten | rechts, B-seitig |
| Anbauvorrichtung | vorbereitet für Euro-Flansch |
| Farbe | RAL 7031 bzw. nach Wunsch |
| Isolation | H/F |
| Motorschutz | 3 Kaltleitertemperaturfühler |
| Wellenende | zylindrisch mit Nut u. Passfeder |
| Wuchtung | mit halber Passfeder |
| Schwinggrößenstufe | A nach EN 60034-14 |
| Lager | A- u. B-Seite Rillenkugellager, optional A-Seite Rollenlager |
| Umgebungsbedingungen | max. 40°C |
| Aufstellhöhe | 1.000 mÜNN |

| | |
|---------------------------------|--|
| <i>method of cooling</i> | IC 06 forced air ventilated |
| <i>degree of protection</i> | IP 23 S / DIN EN 60034-5 |
| <i>fan mounting</i> | NDE radial top with box-filter |
| <i>type of construction</i> | IM 1001 |
| <i>terminal box</i> | right, NDE |
| <i>mounting kit</i> | prepared for euro flange |
| <i>color</i> | RAL 7031 |
| <i>insulation</i> | H/F |
| <i>motor protection</i> | 3 PTC for trip |
| <i>shaft extension</i> | cylindric with key |
| <i>balancing</i> | with half key |
| <i>vibration severity grade</i> | A / EN 60034-14 |
| <i>bearings</i> | DE and NDE deep groove ball bearings, optional DE rolller bearings |
| <i>ambient temperature</i> | max. 40°C |
| <i>site altitude</i> | 1.000 m above sea level |

Abweichende Leistungen und Drehzahlen auf Anfrage – Different output and speed on request

EFG EF 180 L 06-23-A-F-E

| | = | Anbauten | <i>Attachments</i> |
|------------|---|---|--|
| - | = | keine Anbauten | <i>no attachments</i> |
| R | = | Resolver | <i>Resolver</i> |
| E | = | Inkrementalgeber | <i>Encoder</i> |
| S | = | Sin/Cos-Geber / Absolutwertgeber | <i>Sine-cosine encoder / absolute encoder</i> |
| B | = | Bremse | <i>Brake</i> |
| G | = | Getriebe | <i>Gear</i> |
| T | = | Analogtacho | <i>Tacho-Generator</i> |
| D | = | Digitaltacho | <i>Digital-Tacho-Generator</i> |
| XX | = | weitere Anbauten | <i>other attachments</i> |
| | = | Bauform | <i>Type of construction</i> |
| F | = | Fußausführung | <i>foot mounted design</i> |
| FL | = | Flanschausführung | <i>flange mounted design</i> |
| FF | = | Fuß-Flanschausführung | <i>foot-flange mounted design</i> |
| V | = | Vertikalausführung | <i>vertical execution</i> |
| | = | Polpaarzahl | <i>Number of poles</i> |
| A | = | 1 (2-polig) | <i>1 (2-poles)</i> |
| B | = | 2 (4-polig) | <i>2 (4-poles)</i> |
| C | = | 3 (6-polig) | <i>3 (6-poles)</i> |
| XX | = | weitere Polpaare | <i>other types of poles</i> |
| | = | Schutzart | <i>Degree of protection</i> |
| 23 | = | IP 23 S | <i>IP 23 S</i> |
| XX | = | IP... weitere Schutzarten | <i>IP... other types of protection</i> |
| | = | Kühlart | <i>Cooling method</i> |
| 06 | = | IC 06 Innenkühlung, fremdbelüftet mit Aufbauflüfter | <i>IC 06 open-circuit air cooling, forced-ventilated with top-mounted fan</i> |
| 17 | = | IC 17 Innenkühlung, fremdbelüftet mit Kanalanschluss auf BS | <i>IC 17 open-circuit air cooling, separately-ventilated with duct on NDE</i> |
| 37 | = | IC 37 Innenkühlung, fremdbelüftet mit Kanalanschluss auf AS u. BS | <i>IC 37 open-circuit cooling, separately-ventilated with duct on DE and NDE</i> |
| 71 | = | IC 71 W Wassermantelkühlung | <i>IC 71 W water-jacket cooling</i> |
| 86 | = | IC 86 W Innenkühlung mit aufgebautem Luft-Wasser-Kühler | <i>IC 86 W open-circuit cooling with fitted air-to-water cooler</i> |
| 410 | = | IC 410 unbelüftet | <i>IC 410 totally-enclosed, non-ventilated</i> |
| 411 | = | IC 411 Oberflächenkühlung, eigenbel. | <i>IC 411 totally-enclosed, fan-cooled</i> |
| 416 | = | IC 416 Oberflächenkühlung, fremdbel. | <i>IC 416 totally-enclosed, forced-ventilated</i> |
| 616 | = | IC 616 Innenkühlung mit aufgebautem Luft-Luft-Kühler | <i>IC 616 open-circuit air cooling with fitted air-to-air cooler</i> |
| XX | = | IC ... weitere Kühlarten | <i>IC... other cooling methods</i> |
| | = | Baulänge | <i>Construction length</i> |
| XS | = | sehr kurz | <i>very short</i> |
| S | = | kurz | <i>short</i> |
| M | = | mittel | <i>medium-sized</i> |
| L | = | lang | <i>long</i> |
| X | = | sehr lang | <i>very long</i> |
| XL | = | extra lang | <i>extra long</i> |
| XV | = | Sonderlänge | <i>special length</i> |
| | = | Baugröße | <i>Frame</i> |
| z.B. 180 | = | 180 mm Achshöhe | <i>180 mm frame size</i> |
| | = | Gehäuseausführung | <i>Type of housing</i> |
| EF | = | Standard | <i>standard</i> |
| S | = | verstärktes Gehäuse | <i>rugged housing</i> |
| W | = | Wassermantelgehäuse | <i>water jacket housing</i> |
| EFG | = | Gleichstrom-Nebenschluss-Motor | <i>DC shunt wound motor</i> |



| EFG EF | Flanschmaße | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--------|------------------|-----|----|----|-----|-----|-----|------|------|------|----|-----|-----|-----|-----|-----|------|------|----|-----|----|-----|-----|-----|-----|-------|----|-----|----|-----|----|
| | flange dimension | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | a | b | c | Ød | e | f | g1 | g2 | h | k1 | k2 | l | m | n | o | p | p1 | r | Øs | t | u | v | w | Øx | Øa1 | Øb1 | c1 | e1 | f1 | Øs1 | |
| 100 S | 320 | | | | | | | | | 553 | | | | | | | | | | | | | | | | | | | | | |
| 100 M | 365 | 160 | 10 | 28 | 44 | 169 | 106 | 154 | 100 | 698 | 54 | 60 | 120 | 40 | 42 | 134 | 398 | 183 | 11 | 31 | 8 | 31 | 63 | 110 | 250 | 180j6 | 11 | 215 | 4 | 14 | |
| 100 L | 410 | | | | | | | | | 643 | | | | | | | | | | | | | | | | | | | | | |
| 112 L | 310 | 190 | 10 | 38 | 58 | 165 | 115 | 186 | 112 | 638 | 56 | 80 | 60 | 40 | 47 | 150 | 421 | 229 | 12 | 41 | 10 | 21 | 70 | 110 | 200 | 130j6 | 23 | 165 | 3 | 11 | |
| 132 S | 293 | | | | | | | | | 689 | | | | | | | | | | | | | | | | | | | | | |
| 132 M | 232 | 216 | 12 | 48 | 39 | 235 | 140 | 227 | 132 | 719 | 56 | 110 | 80 | 50 | 49 | 150 | 526 | 292 | 13 | 51 | 14 | 23 | 89 | 130 | 250 | 180j6 | 25 | 215 | 4 | 14 | |
| 132 L | 383 | | | | | | | | | 779 | | | | | | | | | | | | | | | | | | | | | |
| 160 S | 349 | 254 | 14 | 55 | 35 | 223 | 167 | 225 | 160 | 793 | 63 | 110 | 90 | 60 | 62 | 265 | 582 | 292 | 13 | 59 | 16 | 43 | 108 | 140 | 300 | 230j6 | 28 | 265 | 4 | 14 | |
| 160 M | 394 | | | 55 | | 223 | | 255 | | 838 | | 110 | | | 62 | | 582 | 292 | | 59 | 16 | 43 | | | | | | | | | |
| 160 L | 434 | | | 55 | | 223 | | 255 | | 878 | | 110 | | | 62 | | 582 | 292 | | 59 | 16 | 43 | | | | | | | | | |
| 160 X | 519 | | | 60 | | 243 | | 395 | | 993 | | 140 | | | 58 | | 602 | 363 | | 64 | 18 | 29 | | | | | | | | | |
| 180 S | 442 | 279 | 15 | 60 | 55 | 205 | 187 | 275 | 180 | 914 | 61 | 140 | 95 | 70 | 79 | 187 | 602 | 292 | 15 | 64 | 18 | 51 | 121 | 160 | 350 | 250h6 | 24 | 300 | 5 | 18 | |
| 180 M | 482 | | | 60 | | 205 | | 275 | | 954 | | | | | 79 | | 602 | 292 | | 64 | | | | | | | | | | | 65 |
| 180 L | 532 | | | 65 | | 223 | | 315 | | 1054 | | | | | 75 | | 626 | 363 | | 69 | | | | | | | | | | | 51 |
| 180 X | 592 | | | 65 | | 223 | | 315 | | 1124 | | | | | 75 | | 626 | 363 | | 69 | | | | | | | | | | | 51 |
| 180 XL | 652 | | | 65 | 267 | 315 | | 1124 | | 1124 | | | | 68 | | 666 | 380 | | 69 | | 52 | | | | | | | | | | |
| 200 S | 476 | 318 | 15 | 70 | 75 | 249 | 210 | 335 | 200 | 985 | 61 | 140 | 100 | 75 | 86 | 217 | 709 | 381 | 20 | 74 | 20 | 54 | 133 | 160 | 400 | 300h6 | 30 | 350 | 5 | 18 | |
| 200 M | 516 | | | | 75 | 249 | | 335 | | 4025 | | | | | 86 | | 709 | 381 | | | | | | | | | | | | | |
| 200 L | 556 | | | | 75 | 249 | | 335 | | 1065 | | | | | 86 | | 709 | 381 | | | | | | | | | | | | | |
| 200 X | 616 | | | | 65 | 249 | | 355 | | 1125 | | | | | 86 | | 709 | 381 | | | | | | | | | | | | | |
| 200 XL | 696 | | | | 65 | 296 | | 355 | | 1205 | | | | | 83 | | 733 | 453 | | | | | | | | | | | | | |
| 225 S | 561 | 256 | 18 | 85 | 65 | 227 | 235 | 370 | 225 | 1142 | 69 | 170 | 110 | 90 | 108 | 245 | 759 | 381 | 20 | 90 | 22 | 78 | 149 | 190 | 450 | 350h6 | 40 | 400 | 5 | 18 | |
| 225 M | 601 | | | | 65 | 227 | | | | 1182 | | | | | 108 | | 759 | 381 | | | | | | | | | | | | | |
| 225 L | 661 | | | | 65 | 227 | | | | 1242 | | | | | 108 | | 759 | 381 | | | | | | | | | | | | | |
| 225 X | 726 | | | | 65 | 227 | | | | 1307 | | | | | 103 | | 781 | 456 | | | | | | | | | | | | | |
| 225 XL | 796 | | | | 65 | 269 | | | | 1377 | | | | | 103 | | 783 | 456 | | | | | | | | | | | | | |
| 250 S | 683 | 406 | 20 | 85 | 238 | 307 | 395 | 250 | 1414 | 1324 | 89 | 170 | 160 | 90 | 238 | 247 | 985 | 468 | 24 | 90 | 22 | 79 | 168 | 220 | 550 | 450h6 | 18 | 500 | 5 | 18 | |
| 250 M | 723 | | | 85 | 238 | | | | | 1634 | | | | | 170 | | 238 | 985 | | 468 | | | | | | | | | | | |
| 250 L | 773 | | | 85 | 238 | | | | | 1414 | | | | | 170 | | 238 | 985 | | 468 | | | | | | | | | | | |
| 250 X | 808 | | | 95 | 238 | | | | | 1459 | | | | | 180 | | 238 | 985 | | 468 | | | | | | | | | | | |
| 250 XL | 888 | | | 95 | 275 | | | | | 1539 | | | | | 180 | | 275 | 1027 | | 545 | | | | | | | | | | | |
| 280 L | 910 | 457 | 22 | 95 | 85 | 276 | 330 | 550 | 280 | 1570 | 95 | 180 | 150 | 100 | 248 | 277 | 1070 | 544 | 24 | 100 | 25 | 112 | 190 | 260 | 660 | 550h6 | 22 | 600 | 6 | 24 | |
| 280 X | 990 | | | | | | | | | 1650 | | | | | | | | | | | | | | | | | | | | | |
| 280 XL | 1110 | | | | | | | | | 1760 | | | | | | | | | | | | | | | | | | | | | |