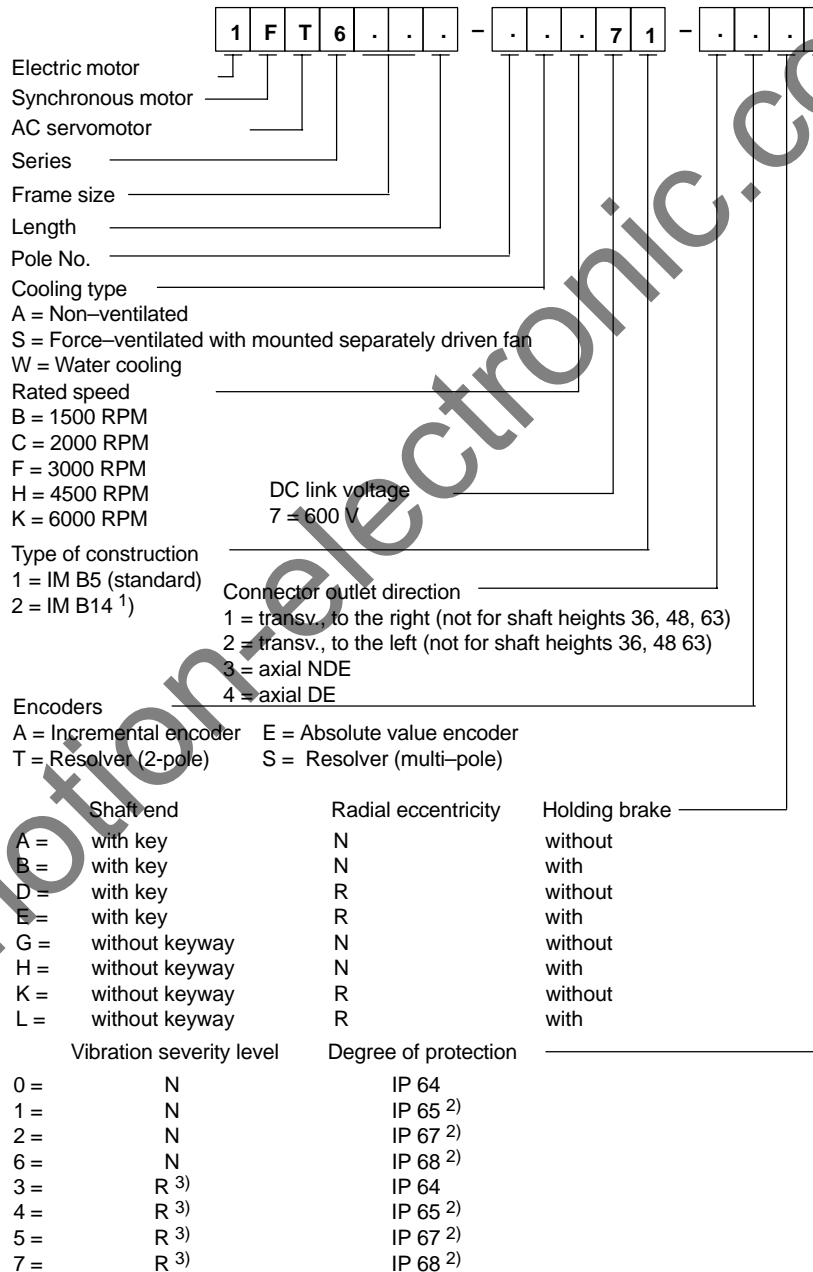


2

Order Designations

Order designation (standard type)

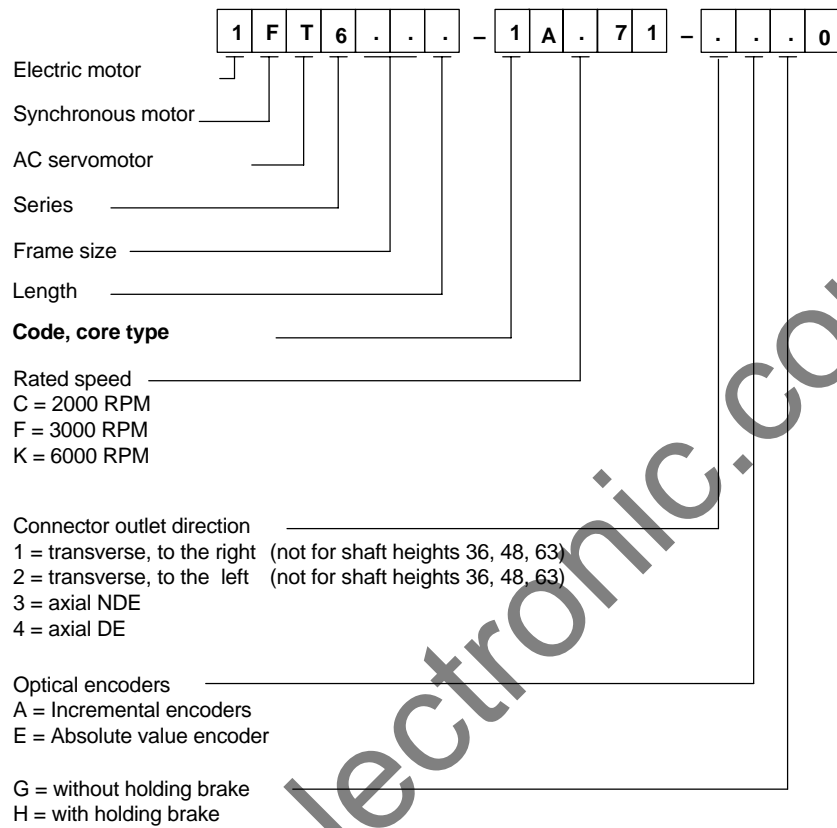


1FT6

1) only for shaft heights 63, 80, 100
2) not for motors with forced ventilation
3) not 1FT6 108-8WF7

2 Order Designations

Order designations, core types



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3.1 Speed-torque diagrams

Table 3-8 Standard motor 1FT6064

| 1FT6064 | | | | | | |
|-----------------------------------|---------------------|----------------------------|-------|-------|-------------------------|-------|
| Technical data | Code | Units | -□AC7 | -□AF7 | -□AH7 | -□AK7 |
| Engineering data | | | | | | |
| Rated speed | n_{rated} | RPM | 2000 | 3000 | 4500 | 6000 |
| Rated torque | M_{rated} (100 K) | Nm | 8.00 | 7.00 | 4.80 | 2.10 |
| Rated current | I_{rated} (100 K) | A | 3.8 | 4.9 | 5.5 | 3.5 |
| Stall torque | M_0 (60 K) | Nm | 7.90 | 7.90 | 7.90 | 7.90 |
| Stall torque | M_0 (100 K) | Nm | 9.50 | 9.50 | 9.50 | 9.50 |
| Stall current | I_0 (60 K) | A | 3.50 | 5.00 | 7.50 | 10.0 |
| Stall current | I_0 (100 K) | A | 4.20 | 6.1 | 9.10 | 12.1 |
| Moment of inertia (with brake) | J_{mot} | 10^{-4} kgm ² | 16.2 | 16.2 | 16.2 | 16.2 |
| Moment of inertia (without brake) | J_{mot} | 10^{-4} kgm ² | 13.0 | 13.0 | 13.0 | 13.0 |
| Limit data | | | | | | |
| Max. speed | n_{max} | RPM | 3150 | 4550 | 6800 | 9100 |
| Max. torque | M_{max} | Nm | 38 | 38 | 38 | 38 |
| Peak current | I_{max} | A | 23.0 | 33.0 | 49.0 | 66.0 |
| Limiting torque (600 V) | M_{limit} | Nm | 21.5 | 21.7 | 22.9 | 23.4 |
| Limiting current (600 V) | I_{limit} | A | 9.9 | 14.5 | 23.2 | 31.8 |
| Physical constants | | | | | | |
| Torque constant | k_T | Nm/A | 2.26 | 1.56 | 1.04 | 0.79 |
| Voltage constant (phase-to-phase) | k_E | V/1000 RPM | 140 | 97 | 65 | 49 |
| Winding resistance | $R_{ph.}$ | Ohm | 2.95 | 1.42 | 0.63 | 0.35 |
| Three-phase inductance | L_D | mH | 28.0 | 13.5 | 6.0 | 3.4 |
| Electrical time constant | T_{el} | ms | 9.5 | 9.5 | 9.5 | 9.5 |
| Mechanical time constant | T_{mech} | ms | 2.2 | 2.2 | 2.2 | 2.2 |
| Thermal time constant | T_{th} | min | 35 | 35 | 35 | 35 |
| Thermal resistance | R_{th} | W/K | 0.11 | 0.11 | 0.11 | 0.11 |
| Weight with brake | m | kg | 13.0 | 13.0 | 13.0 | 13.0 |
| Weight without brake | m | kg | 12.5 | 12.5 | 12.5 </td <td>12.5</td> | 12.5 |

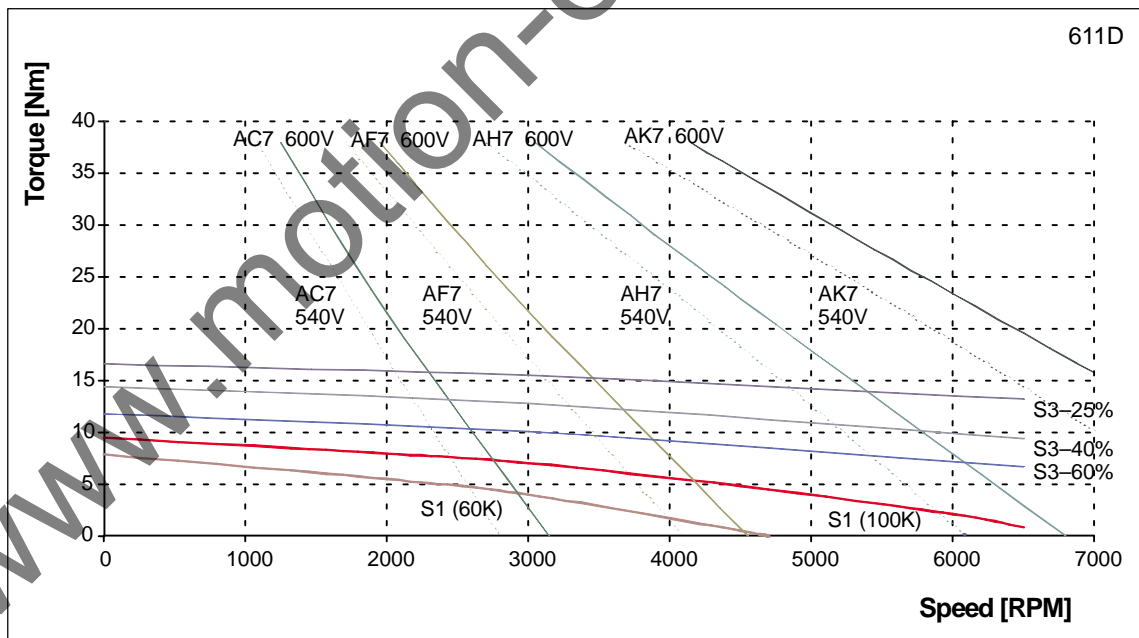


Fig. 3-9 Speed-torque diagram 1FT6064

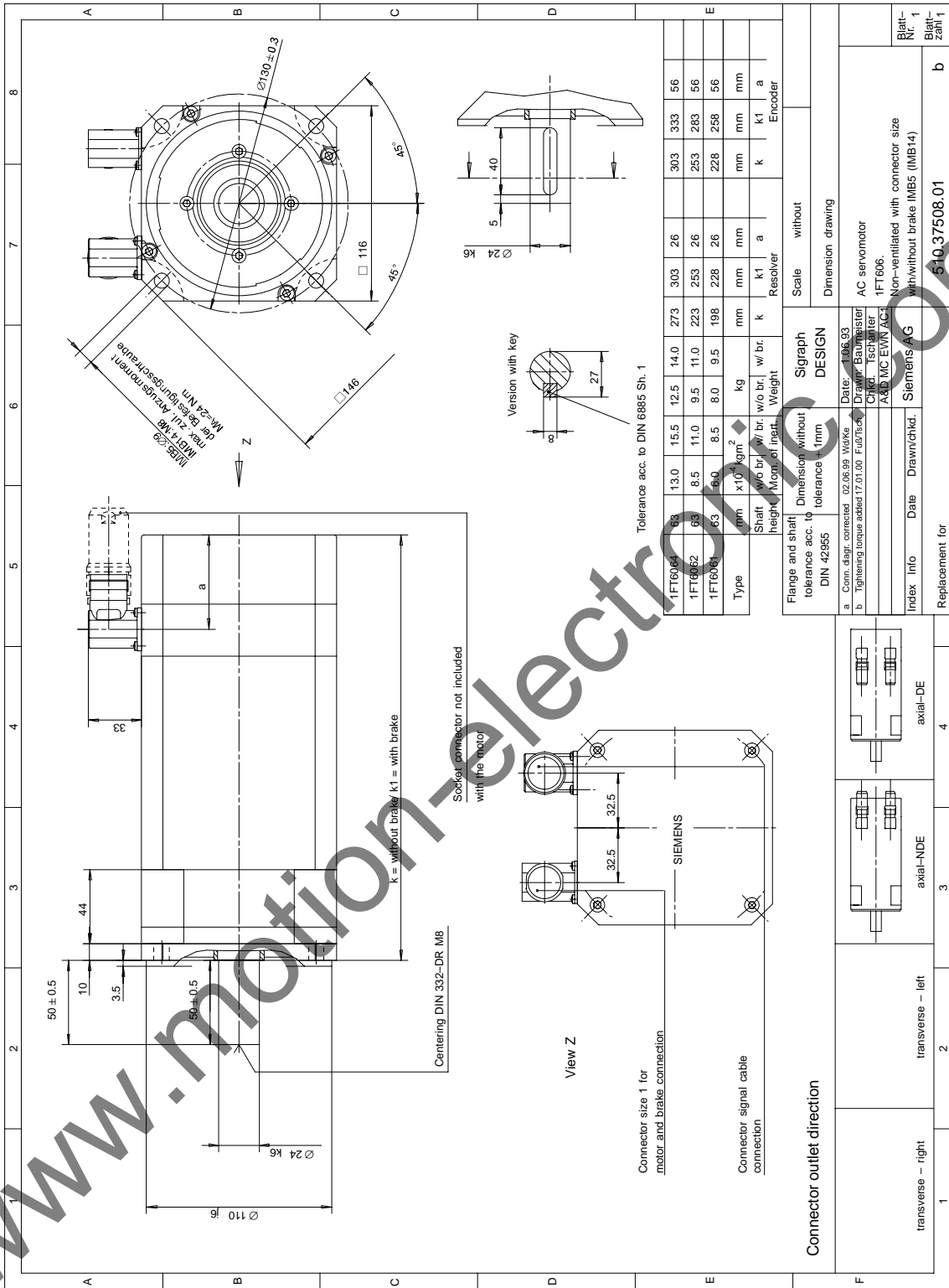


Fig. 4-4 1FT606□ non-ventilated with connector size 1