

## RATED DATA

|                |                        |
|----------------|------------------------|
| Motor type     | <b>NN7-4000-30-560</b> |
| Winding number | <b>01-00833</b>        |

|                     |           |                        |
|---------------------|-----------|------------------------|
| Rated Speed         | $n_n$     | 3000 min <sup>-1</sup> |
| DC Bus Voltage      | $U_{dc}$  | 560 V                  |
| Nominal AC Voltage  | $U_n$     | 380 V                  |
| Rated Motor Voltage | $U_m$     | 257 V                  |
| Rated Torque        | $M_n$     | 25,0 Nm                |
| Rated AC Current    | $I_n$     | 20,1 A                 |
| Stall Torque        | $M_o$     | 40,0 Nm                |
| Stall AC Current    | $I_o$     | 26,3 A                 |
| Peak Torque         | $M_{max}$ | 120 Nm                 |
| Peak Current        | $I_{max}$ | 90 A                   |
| Max. Speed          | $n_{max}$ | 6000 min <sup>-1</sup> |
| EMF Constant        | $K_E$     | 92,0 V/1000            |
| Torque Constant     | $K_T$     | 1,52 Nm/A              |
| Terminal Resistance | $R_{2ph}$ | 0,17 $\Omega$          |
| Terminal Inductance | $L_{2ph}$ | 3,1 mH                 |
| Number of poles     | $2p$      | 10                     |

|                         |       |                        |
|-------------------------|-------|------------------------|
| No Load Speed           | $n_o$ | 4130 min <sup>-1</sup> |
| Torque at $I_{max}/U_n$ | $M_z$ | 119 Nm                 |
| Speed at $I_{max}/U_n$  | $n_z$ | 2160 min <sup>-1</sup> |
| Max. Torque at $n_n$    | $M_x$ | 77 Nm                  |

|                       |               |                         |
|-----------------------|---------------|-------------------------|
| El. Time Constant     | $\tau_{el}$   | 18,2 ms                 |
| Mech. Time Constant   | $\tau_{mech}$ | 0,88 ms                 |
| Thermal Time Constant | $\tau_{th}$   | 90 min                  |
| Rotor Inertia         | $J$           | 69,00 kgcm <sup>2</sup> |

**Torque/speed curves**

