

Projektnummer: ---

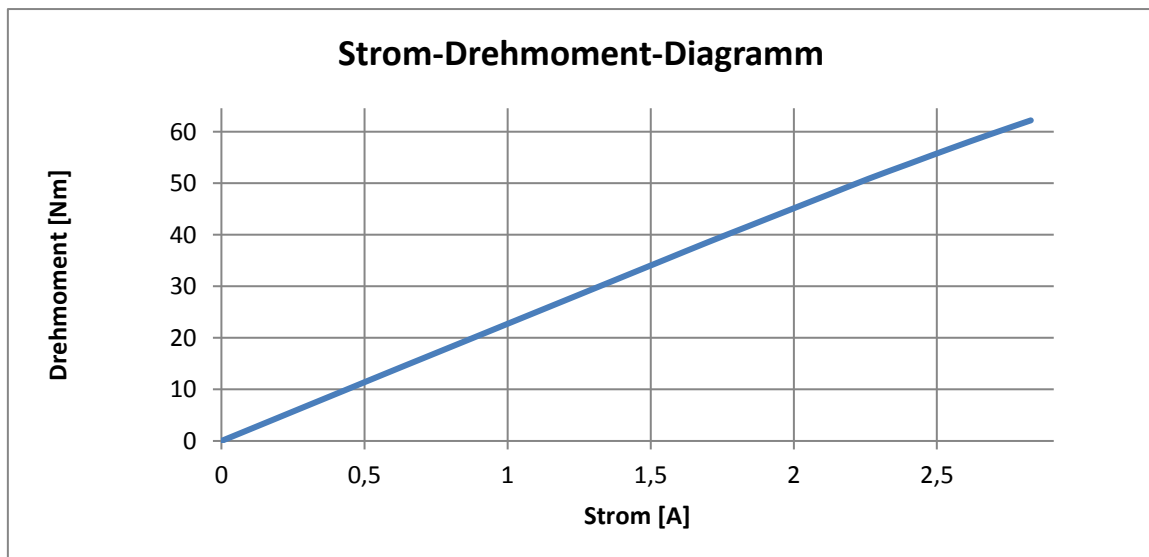
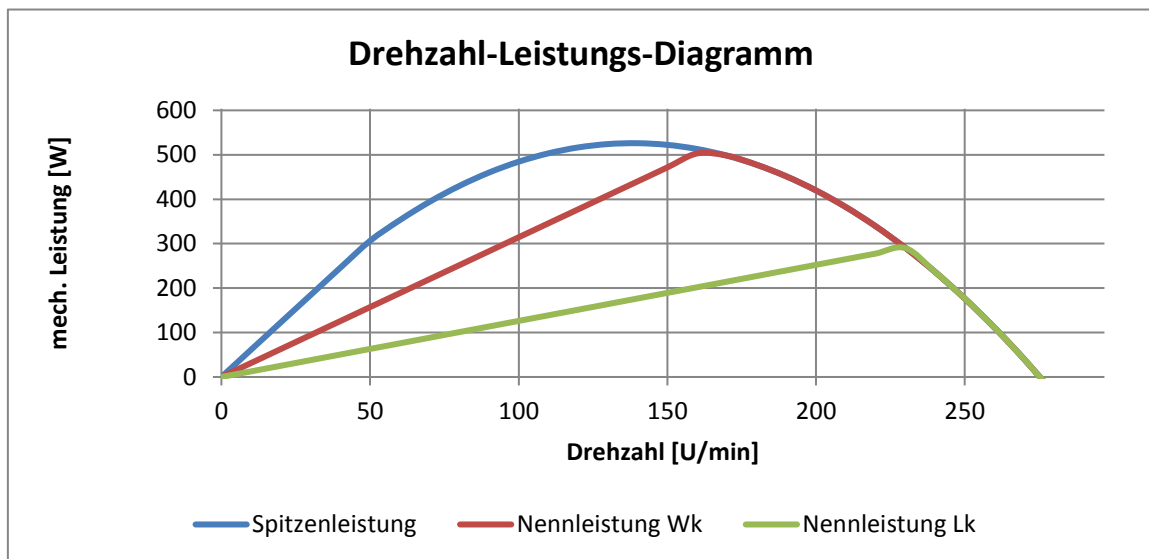
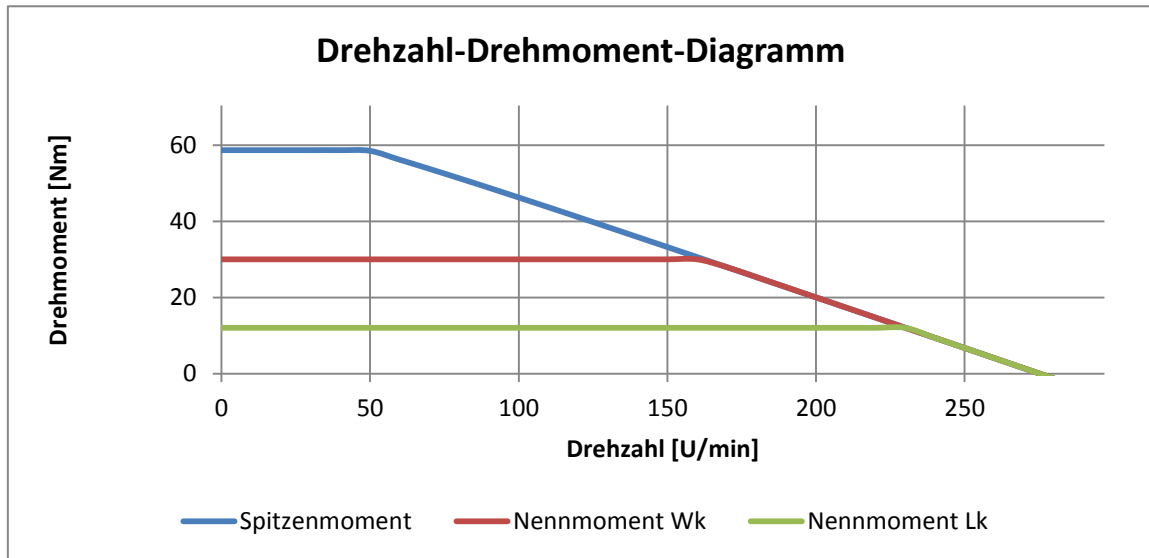
| | Zeichen | Einheit | Wert |
|------------------------------|----------------------|------------------|------|
| Nenndaten Luftkühlung | | | |
| Nennmoment | M _{NennLk} | Nm | 12 |
| Nennstrom | I _{NennLk} | A _{eff} | 0,5 |
| Nenn Drehzahl | n _{NennLk} | U/min | 230 |
| abgegebene Wellenleistung | P _{NennLk} | W | 290 |
| Verlustleistung | P _{VNennLk} | W | 59 |
| Stillstands-/ Haltemoment | M _{HaltLk} | Nm | 8,5 |
| Stillstands-/ Haltestrom | I _{HaltLk} | A _{eff} | 0,4 |

| | | | |
|--------------------------------|----------------------|------------------|------|
| Nenndaten Wasserkühlung | | | |
| Nennmoment | M _{NennWk} | Nm | 30 |
| Nennstrom | I _{NennWk} | A _{eff} | 1,3 |
| Nenn Drehzahl | n _{NennWk} | U/min | 160 |
| abgegebene Wellenleistung | P _{NennWk} | W | 503 |
| Verlustleistung | P _{VNennWk} | W | 327 |
| Stillstands-/ Haltemoment | M _{HaltWk} | Nm | 21,2 |
| Stillstands-/ Haltestrom | I _{HaltWk} | A _{eff} | 0,9 |

| | | | |
|------------------------------|--------------------|------------------|------|
| Daten bei Spitzenlast | | | |
| Spitzenmoment | M _{Peak} | Nm | 59 |
| Spitzenstrom | I _{Peak} | A _{eff} | 2,6 |
| Drehzahl bei Spitzenmoment | n _{Peak} | U/min | 40 |
| abgegebene Wellenleistung | P _{Peak} | W | 246 |
| Verlustleistung | P _{VPeak} | W | 1290 |

| | | | |
|---|-------------------|---------------------------|------------------------|
| Daten | | | |
| Drehmomentkonstante | k _t | Nm/A _{eff} | 22,783 |
| Spannungskonstante (Phase - Phase) | k _e | V _{eff} /(rad/s) | 13,734 |
| | | V _{eff} /(U/min) | 1,438 |
| Motorkonstante | k _m | Nm/VW | 1,575 |
| Leerlaufdrehzahl | n _{Leer} | U/min | 270 |
| max. Frequenz | f _{max} | Hz | 95 |
| Zwischenkreisspannung | U _{Zk} | V _{DC} | 560 |
| Ø Widerstand pro Phase (nur Wicklung) | R _{Ph20} | Ω | 61,495 |
| Ø Induktivität pro Phase (nur Wicklung) | L _{Ph} | mH | 177,040 |
| elektr. Zeitkonstante τ=L/R | τ | ms | 2,88 |
| Polpaarzahl | n | | 21 |
| Drehmasse Rotor (Einbausatz) | J | kgm ² | 0,447*10 ⁻² |
| Motorgewicht ohne Gehäuse | m | kg | 2,7 |
| Statoraußendurchmesser ohne Gehäuse | d _A | mm | 211,5 |
| Luftspaltdurchmesser | d _{LS} | mm | 168,8 |
| Eisenlänge | l | mm | 20 |
| Schaltung | | | Stern |

Achten Sie darauf, dass Ihr Regler den Motornenn- und Spitzenstrom bereitstellen kann.
Eine Anpassung der Drehzahl kann nach Rücksprache erfolgen.
Auf Anfrage sind andere Zwischenkreisspannungen möglich.

Project-No.: ---

| | Symbol | Unit | Value |
|---------------------------------------|--------------------|------------------|-------|
| Rated Data free Air Convection | | | |
| Nominal Torque | T _{NomAC} | Nm | 12 |
| Nominal Current | I _{NomAC} | A _{rms} | 0,5 |
| Nominal Speed | n _{NomAC} | rpm | 230 |
| Nominal Power | P _{NomAC} | W | 290 |
| Power Dissipation | P _{DAC} | W | 59 |
| Holding Torque | T _{HAC} | Nm | 8,5 |
| Holding Current | I _{HAC} | A _{rms} | 0,4 |

| | | | |
|--------------------------------|--------------------|------------------|------|
| Rated Data Water cooled | | | |
| Nominal Torque | T _{NomWC} | Nm | 30 |
| Nominal Current | I _{NomWC} | A _{rms} | 1,3 |
| Nominal Speed | n _{NomWC} | rpm | 160 |
| Nominal Power | P _{NomWC} | W | 503 |
| Power Dissipation | P _{dWC} | W | 327 |
| Holding Torque | T _{HWC} | Nm | 21,2 |
| Holding Current | I _{HWC} | A _{rms} | 0,9 |

| | | | |
|----------------------|--------------------|------------------|------|
| Peak Data | | | |
| Peak Torque | T _{Peak} | Nm | 59 |
| Peak Current | I _{Peak} | A _{rms} | 2,6 |
| Speed at Peak Torque | n _{Peak} | rpm | 40 |
| Peak Power | P _{Peak} | W | 246 |
| Power Dissipation | P _{DPeak} | W | 1290 |

| | | | |
|---------------------------------------|-------------------|--|------------------------|
| Data | | | |
| Torque Constant | k _t | Nm/A _{rms} | 22,783 |
| BEMF Constant (Phase - Phase) | k _e | V _{rms} /(rad/s) V _{rms} /rpm | 13,734 1,438 |
| Motor Constant | k _m | Nm/√W | 1,575 |
| max. Speed | n _{max} | rpm | 270 |
| max. Frequency | f _{max} | Hz | 95 |
| DC Bus Voltage | U _{DC} | V _{DC} | 560 |
| ∅ Resistance per Phase (Winding only) | R _{Ph20} | Ω | 61,495 |
| ∅ Inductance per Phase (Winding only) | L _{Ph} | mH | 177,040 |
| electr. Time Constant τ=L/R | τ | ms | 2,88 |
| Number of Polepairs | n | | 21 |
| Rotor Inertia (assembly set) | J | kgm ² | 0,447*10 ⁻² |
| Weight of Motor w/o Housing | m | kg | 2,7 |
| Outer Stator Diameter w/o Housing | d _A | mm | 211,5 |
| Airgap Diameter | d _{Ag} | mm | 168,8 |
| Length of Stator | l | mm | 20 |
| Winding Connection | | | Star |

Ensure that your servo drive can handle the Nominal- and Peakcurrent of the Motor.
An adjustment of the Speed can be done after consultation.
By request, other DC Bus Voltages are possible.

Date:

03.03.2014



