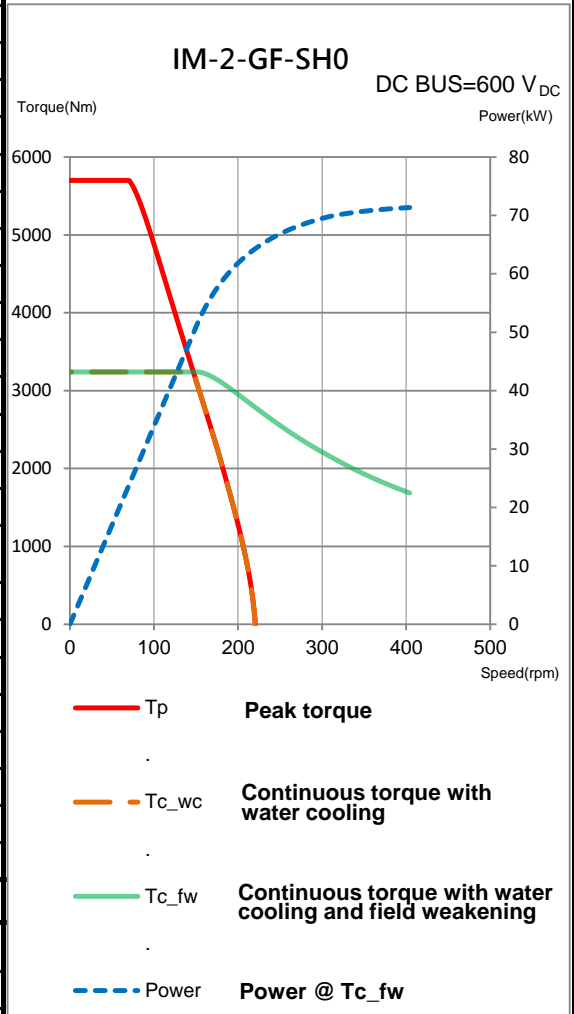


IM-2-GF-SH0

Electrical specifications

| Winding code : SH0 | Symbol | Unit | Field weakening & Water cooling |
|-----------------------------------|-------------|-----------------|---------------------------------|
| Continuous torque | T_c | Nm | 3240 |
| Continuous current | I_c | A_{rms} | 121.2 |
| Stall torque | T_s | Nm | 2676 |
| Stall current | I_s | A_{rms} | 97 |
| Peak torque(for 1sec.) | T_p | Nm | 5700 |
| Peak current(for 1sec.) | I_p | A_{rms} | 320 |
| Torque constant | K_t | Nm/A_{rms} | 28.93 |
| Electrical time constant | T_e | ms | 8.8 |
| Resistance (line to line at 25°C) | R_{25} | Ω | 0.4 |
| Inductance (line to line) | L_d / L_q | mH | 3.5 / 3.85 |
| Number of poles | 2p | | 88 |
| Back emf constant (line to line) | K_v | $V_{rms}/rad/s$ | 16.7 |
| Motor constant (at 25°C) | K_m | Nm/\sqrt{W} | 36.31 |
| Thermal resistance | R_{th} | K/W | 0.012 |
| Thermal sensor | | | PTC SNM100+SNM130+Pt1000 |
| Max. DC BUS | V_{DC} | V | 750 |
| Inertia of rotor | J | kgm^2 | 3.42 |
| Thermal time constant | T_{th} | s | 150 |
| Max. continuous power dissipation | P_c | W | 12339 |
| Max. peak power dissipation | P_p | W | 86016 |
| Max. speed(at 600VDC) | | rpm | 400 |
| Based speed(at 600VDC) | | rpm | 153 |
| Rated speed(at 600VDC) | | rpm | 400 |

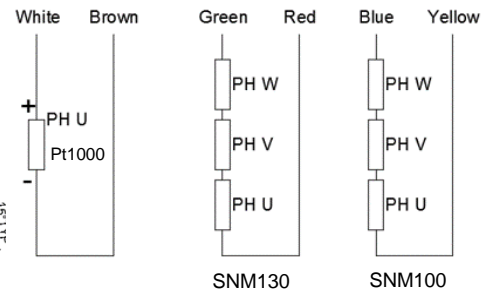
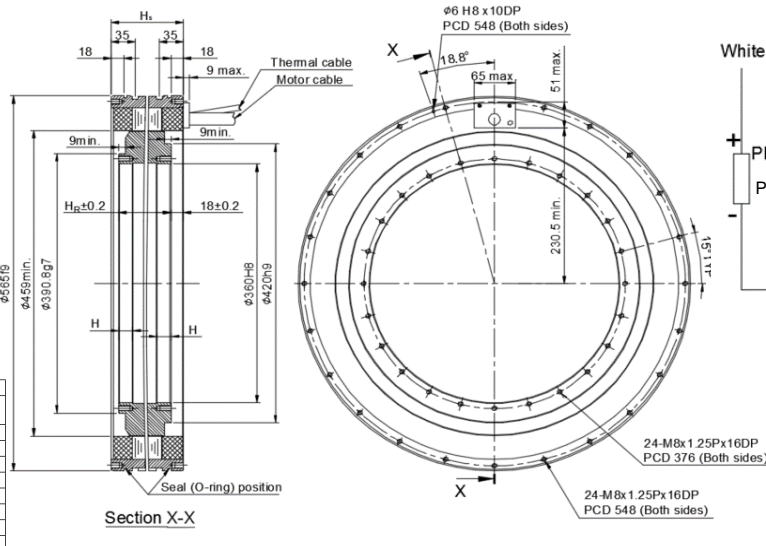
T-N curve



Mechanical specifications

| | Symbol | Unit | Field weakening & Water cooling |
|--|----------------|-------|---------------------------------|
| Mass of rotor | M_r | kg | 81.5 |
| Mass of stator | M_s | kg | 111.8 |
| Height of stator | H_s | mm | 210 |
| Height of rotor | H_r | mm | 181 |
| Length of rotor centring fit | H | mm | 20 |
| Water temperature difference for P_c | $\Delta\theta$ | K | 5 |
| Minimum water flow | q | l/min | 35.3 |
| Max. pressure drop | Δp | bar | 4 |

Thermal sensor



| General tolerance mm | |
|----------------------|-----------|
| Nominal dimension | Tolerance |
| ~ 6 | ±0.1 |
| > 6 ~ 30 | ±0.2 |
| > 30 ~ 120 | ±0.3 |
| > 120 ~ 300 | ±0.4 |
| > 300 ~ 600 | ±0.5 |
| > 600 ~ 1200 | ±0.8 |
| > 1200 ~ 2400 | ±1.0 |
| > 2400 | ±1.5 |

| Motor wire table | |
|-------------------|--------|
| Color or wire no. | Signal |
| U/L1 | PH U |
| V/L2 | PH V |
| W/L3 | PH W |
| Green/Yellow | GND |

Except dimensions, all the specifications in the table are in ±10% of tolerance

Version: 2.00

This drawing is only for reference, detail dimensions please refer to approval drawing.

Date: 2020/10/23