IM-2-2F-PB0 T-N curve Electrical specifications Field weakening & Winding code: PB Symbol Unit Water cooling Continuous torque Nm250 IM-2-2F-PB0 I_c A_{rms} 20.4 Continuous current DC BUS=600 V_{DC} Ts 210 Stall torque NmTorque(Nm) Power(kW) 16.3 Stall current I_s A_{rms} 450 16 T_p 384 Peak torque(for 1sec.) Nm 51 400 Peak current(for 1sec.) I_p A_{rms} 14 Nm/A_{rms} Kt 14.03 Torque constant 350 12 T_e 7.2 Electrical time constant ms 300 Resistance (line to line at 25°C) R_{25} 0 3.4 10 24.6 / 36.16 Inductance (line to line) Ld / Lq mΗ 250 22 8 Number of poles 2p 200 Back emf constant (line to line) K_v V_{rms}/rad/s 8.1 6 K_{m} 6.21 150 Motor constant (at 25°C) Nm/√W R_{th} K/W 0.049 Thermal resistance 100 PTC Thermal sensor SNM100+SNM130+Pt1000 2 50 Max. DC BUS V_{DC} 750 0 O 0.0215 J Inertia of rotor kgm² 500 1000 1500 2000 2500 T_{th} Thermal time constant 110 Speed(rpm) s Po W Tp 2996 Peak torque Max. continuous power dissipation Max. peak power dissipation P_p W 18727 Max. speed(at 600VDC) 2150 rpm Continuous torque with Tc_wc water cooling Based speed(at 600VDC) 379 rpm Rated speed(at 600VDC) 2150 rpm Continuous torque with water cooling and field weakening Tc fw Mechanical specifications Field weakening & Symbol Unit Water cooling Mass of rotor M, kg 10.79 - - Power Power @ Tc_fw 22.2 Ms Mass of stator kg 200 Height of stator $H_{\mathbb{S}}$ mm 171 Height of rotor H_R mm 20 Н ength of rotor centring fit mm Κ Water temperture difference for Po Δθ 5 Minimum water flow I/min 8.6 q 1 Max. pressure drop △p bar Thermal sensor Ø5 H8 x9DP Brown Red Yellow White Green Blue PCD 185 (Both sides) Motor cable 12.5 12.5 PH W PH W 9 max PH V PH V Pt1000 (8) PH U PH U $H_R \pm 0.2$ SNM130 SNM100 General tolerance mm Nominal Motor wire table 12-M6x1.0Px12DF

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

Section X-X

Seal (O-ring) position

±0.2 ±0.3 ±0.4

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

Date: 2020/10/23

Version: 2.00

Color or wire no.

U/L1

V/L2

W/L3

Green/Yellow

Signal

PH U

PH V

PH W

GND

16-M5x0.8Px10DP

PCD 185 (Both sides)