IM-2-2A-PB0 T-N curve Electrical specifications Field weakening & Winding code: PB Symbol Unit Water cooling Continuous torque Nm168 IM-2-2A-PB0 I_c A_{rms} 20.4 Continuous current DC BUS=600 V_{DC} Ts 141 Stall torque NmTorque(Nm) Power(kW) 16.3 Stall current I_s A_{rms} 300 16 T_p 256 Peak torque(for 1sec.) Nm 51 I_p A_{rms} Peak current(for 1sec.) 14 250 Nm/A_{rms} Kt 9.35 Torque constant 12 T_e 7.1 Electrical time constant ms 200 Resistance (line to line at 25°C) R_{25} 0 2.4 10 Inductance (line to line) Ld / Lq mΗ 17 / 24.99 150 22 8 Number of poles 2p Back emf constant (line to line) K_v V_{rms}/rad/s 5.4 6 K_{m} 4.92 100 Motor constant (at 25°C) Nm/√W R_{th} K/W 0.07 Thermal resistance PTC 50 Thermal sensor SNM100+SNM130+Pt1000 2 Max. DC BUS V_{DC} 750 0 O 0.0146 J Inertia of rotor kgm² 1000 2000 3000 4000 T_{th} Thermal time constant 96 Speed(rpm) s Po W Tp 2116 Peak torque Max. continuous power dissipation Max. peak power dissipation P_p W 13226 Max. speed(at 600VDC) 3200 rpm Continuous torque with Tc_wc water cooling Based speed(at 600VDC) 582 rpm Rated speed(at 600VDC) 3200 rpm Continuous torque with water cooling and field weakening Tc fw Mechanical specifications Field weakening & Symbol Unit Water cooling Mass of rotor M, kg 7.43 - - Power Power @ Tc_fw Ms 15 Mass of stator kg 150 Height of stator $H_{\mathbb{S}}$ mm Height of rotor H_R 121 mm 20 Н ength of rotor centring fit mm Κ Water temperture difference for Po Δθ 5 Minimum water flow I/min 6.1 q 1 Max. pressure drop △p bar Thermal sensor Ø5 H8 x9DP Red Yellow White Brown 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 dimension Color or wire no. Signal ±0.2 ±0.3 ±0.4 U/L1 PH U

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

Section X-X

Seal (O-ring) position

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

Date: 2020/10/23

Version: 2.00

PH V

PH W

GND

V/L2

W/L3

Green/Yellow

16-M5x0.8Px10DP

PCD 185 (Both sides)