IM-2-AA-PF0 **Electrical specifications** T-N curve Field weakening & Winding code: PF0 Symbol Unit Water cooling T_c Nm 1080 Continuous torque IM-2-AA-PF0 A_{rms} Continuous current I_c 70 DC BUS=600 V_{DC} Ts 907 Stall torque Nm Torque(Nm) Power(kW) Stall current I_s $A_{\text{rms}} \\$ 56 1800 Tp 1630 Peak torque(for 1sec.) Nm 1600 156 Peak current(for 1sec.) I_p A_{rms} 50 Nm/A_{rms} K_t 17.67 Torque constant 1400 Te 6.7 Electrical time constant 1200 40 R₂₅ 0.55 Resistance (line to line at 25°C) Ω Inductance (line to line) 3.7 / 4.77 1000 Lq / Ld mΗ 30 Number of poles 2p 66 800 K_v 10.2 Back emf constant (line to line) V_{rms}/rad/s 600 20 Motor constant (at 25°C) K_{m} Nm/√W 19.4 Thermal resistance R_{th} K/W 0.026 400 10 PTC 100+PTC 130+Pt1000 Thermal sensor 200 Max. DC BUS 750 V_{DC} 0 0 Inertia of rotor J 0.482 kgm² 500 1000 1500 2000 Thermal time constant T_{th} 99 s Speed(rpm) Max. continuous power dissipation P_c W 5733 Тр Peak torque P_p W 28473 Max. peak power dissipation Max. speed(at 600VDC) rpm 1600 Continuous torque with Tc_wc water cooling Based speed(at 600VDC) 298 rpm Rated speed(at 600VDC) 1600 rpm Continuous torque with water cooling and field weakening Mechanical specifications Tc fw Field weakening & Symbol Unit Water cooling 28.7 Mass of rotor M, kg - - - Power Power @ Tc_fw 44.9 Mass of stator M_S kg Height of stator H_{S} 160 mm 121 H_{R} Height of rotor mm Н 20 Length of rotor centring fit mm Water temperture difference for Po △θ Κ 5 Minimum water flow 16.4 q I/min Max. pressure drop △p 2 Thermal sensor ø5 H8 x9DP PCD 370 (Both sides) White Brown Red Blue Yellow Green 10 max PH W PH W PH U PH V Pt1000 H_R±0.2 PH U PH U PTC 130 PTC 100 (10) ance mm Motor wire table 24-M6x1.0Px12DP PCD 228 (Both sides) Color or wire no. Signal U/L1 PH U 24-M6x1.25Px12DP PH V V/L2 Seal (O-ring) position W/L3 PH W Section X-X Green/Yellow GND

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

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

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