HYOSUNG HEAVY INDUSTRIES

INDUCTION MOTOR DATA SHEET

PROJECT No. P42-4160-201904-1163
HS No. 201904-6426_12000_003
L-SPEC No. DSMI_20409E003M

DATA SHEET L-SPEC No. DSML20409F003M SHEET 1 OF 1 CUSTOMER FOR PROPOSAL JOB No. N/A ITEM No.: SERVICE: N/A QUANTITY SET SITE 1 : **GENERAL DATA** PERFORMANCE DATA FRAME No. 180M **OUTPUT** 18.5 kW TYPE TEFC **POLES** 4 **ENCLOSURE** ΤE **ROTOR TYPE** SQUIRREL CAGE **COOLING METHOD** FC(IC411) STARTING METHOD DIRECT ON LINE **INSULATION CLASS CLASS PHASE PHASE** TEMP. RISE AT FULL LOAD FREQUENCY 50 Hz RES. METHOD 80 K (at S.F:1.0) SPEED (AT FULL LOAD) 1470 r/min RATING S1 PRIMARY LOCATION INDOOR VOLTAGE 380 ٧ ALTITUDE LESS THAN NO LOAD CURRENT 20.7 1000 Α m LESS THAN **FULL LOAD CURRENT** HUMIDITY 80 % 38.9 Α 600 AMBIENT TEMP. 40 $^{\circ}$ C LOCKED-ROTOR CURRENT % **EXPLOSION PROOF TYPE** N/A **EFFICIENCY** MOUNTING **B**5 AT 1/2 LOAD 87.3 % **BEARING TYPE** ANTI-FRICTION AT 3/4 LOAD 89.3 % NDE/DE BRG. No. 6310ZZ / 6312ZZ AT FULL LOAD 90.3 % **BRG. LUBRICATION** N/A POWER FACTOR PROTECTION GRADE IP55 AT 1/2 LOAD 65.0 % SERVICE FACTOR 1.0 AT 3/4 LOAD 75.0 % DRIVE DIRECT COUPLED AT FULL LOAD 80.0 % SHAFT **TORQUE EXTENSION** SINGLE **FULL LOAD** 12.26 kg-m **EXTERNAL THRUST** N/A 120.3 N-m LOCKED ROTOR NOISE LEVEL(MEAN VALUE AT 1m FROM MOTOR) 140 % NO-LOAD **STANDARD BREAKDOWN** 190 % VIBRATION 2.2 mm/s (r.m.s) 0.797 MOTOR GD² kg-m² COLD: 2/HOT: 1 (4P) NUMBER OF MAX LOAD GD2 AT MOTOR SHAFT 60.4 kg-m² **CONSECUTIVE STARTS** MOTOR APPROX. WEIGHT 223 kg **PAINTING** ROTATION(VIEWED FROM DE) C.C.W 0.5PB 3.2/4.4 (ENAMEL) **ACCESSORIES (OPTIONAL)** SUBMITTAL DRAWINGS TEMPERATURE DETECTOR **OUTLINE DIMENSION** ES1AS33110 WINDING NO CONDUIT BOX & COVER FS1B100103 TYPE SPEED-TORQUE & 1STP42-4160-201904-1163 N/A **CURRENT CURVE** BEARING NO TYPE N/A THERMAL LIMIT 1TLP42-4160-201904-1163 SPACE HEATER NO & TIME-CURRENT 1PEP42-4160-201904-1163 RATING N/A LOAD vs POWER & EFFICIENCY <RFMARKS> 1. ABOVE ALL DATA ARE CALCULATED AT 100% VOLTAGE. 2. HIGH EFFICIENCY TYPE MOTOR APPLICATION STANDARDS IEC60034-1 < NOTE > 1. THESE DATA ARE ONLY DESIGN VALUES AND SHALL BE GUARANTEED WITH TOLERANCE OF APPLICATION STANDARD 2. EXCEPT FOR STATEMENTS SPECIFIED ON THIS SHEET, ANYTHING ELSE SHALL BE IN ACCORDANCE WITH MAKER'S STANDARD. 0 2019-05-10 S.U.LEE J.H.CHA T.H.KIM 3. THE TEMPERATURE MEASURED AT BEARING HOUSING DOES NOT EXCEED 105 REV. NO DATE PREPARED CHECKED APPROVED