

| HIGEN                                                                                                                                 |                                                      | INDUCTION MOTOR DATA SHEET                             |                                                                                                                                                                                              | 20 HP - 4 P                                                           |                   |
|---------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-------------------|
| MODEL: KMI-20HK1                                                                                                                      |                                                      | CUSTOMER :                                             |                                                                                                                                                                                              | REV. NO : 0                                                           |                   |
| APPLICATION:                                                                                                                          |                                                      | PROJECT NAME:                                          |                                                                                                                                                                                              | QUANTITY : SETS                                                       |                   |
| GENERAL DATA                                                                                                                          |                                                      |                                                        | PERFORMANCE DATA                                                                                                                                                                             |                                                                       |                   |
| FRAME NO.                                                                                                                             |                                                      | 160L                                                   |                                                                                                                                                                                              | OUTPUT 15 kW 20 HP                                                    |                   |
| ENCLOSURE                                                                                                                             | <input type="checkbox"/> DRIP PROOF                  |                                                        | POLES 4 POLES                                                                                                                                                                                |                                                                       |                   |
|                                                                                                                                       | <input checked="" type="checkbox"/> TOTALLY ENCLOSED |                                                        | ROTOR TYPE SQUIRREL CAGE                                                                                                                                                                     |                                                                       |                   |
|                                                                                                                                       | <input type="checkbox"/> Increased Safety Exp.-proof |                                                        | <input checked="" type="checkbox"/> D.O.L <input type="checkbox"/> Y-△<br><input type="checkbox"/> REACTOR ( %TAP) <input type="checkbox"/> V.V.V.F<br><input type="checkbox"/> SOFT-STARTER |                                                                       |                   |
| PROTECTION IP 44                                                                                                                      |                                                      | STARTING METHOD                                        |                                                                                                                                                                                              |                                                                       |                   |
| METHODS OF COOLING <input type="checkbox"/> SC <input checked="" type="checkbox"/> FC <input type="checkbox"/>                        |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
| FREQUENCY 60 Hz                                                                                                                       |                                                      | RATED VOLTAGE 220 V 380 V V                            |                                                                                                                                                                                              |                                                                       |                   |
| PHASE 3 PHASE                                                                                                                         |                                                      | CURRENT                                                |                                                                                                                                                                                              |                                                                       |                   |
| SERVICE FACTOR 1.15                                                                                                                   |                                                      | NO LOAD                                                |                                                                                                                                                                                              | 23.0 A                                                                | 13.5 A A          |
| INSULATION CLASS F CLASS                                                                                                              |                                                      | FULL LOAD                                              |                                                                                                                                                                                              | 52.1 A                                                                | 30.2 A A          |
| TEMP. RISE AT FULL LOAD (at S.F 1.0)                                                                                                  |                                                      | STARTING                                               |                                                                                                                                                                                              | 401.3 A                                                               | 232.3 A A         |
| RES. METHOD 105 °C                                                                                                                    |                                                      | EFFICIENCY                                             |                                                                                                                                                                                              |                                                                       |                   |
| THERMO. METHOD °C                                                                                                                     |                                                      | AT 1/2 LOAD %                                          |                                                                                                                                                                                              |                                                                       |                   |
| LOCATION <input checked="" type="checkbox"/> INDOOR <input type="checkbox"/> OUTDOOR                                                  |                                                      | AT 3/4 LOAD %                                          |                                                                                                                                                                                              |                                                                       |                   |
| ALTITUDE 1000 m                                                                                                                       |                                                      | AT FULL LOAD 91.0 %                                    |                                                                                                                                                                                              |                                                                       |                   |
| HUMIDITY 80 %                                                                                                                         |                                                      | POWER FACTOR                                           |                                                                                                                                                                                              |                                                                       |                   |
| AMBIENT TEMPERATURE -10~40 °C                                                                                                         |                                                      | AT 1/2 LOAD %                                          |                                                                                                                                                                                              |                                                                       |                   |
| RATING <input checked="" type="checkbox"/> CONT. <input type="checkbox"/> %ED                                                         |                                                      | AT 3/4 LOAD %                                          |                                                                                                                                                                                              |                                                                       |                   |
| NEMA DESIGN B                                                                                                                         |                                                      | AT FULL LOAD 83.0 %                                    |                                                                                                                                                                                              |                                                                       |                   |
| MOUNTING <input checked="" type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> B3B5 |                                                      | SPEED (AT FULL LOAD)                                   |                                                                                                                                                                                              | 1760                                                                  | rpm               |
| BEARING                                                                                                                               | TYPE                                                 | BALL                                                   |                                                                                                                                                                                              |                                                                       |                   |
|                                                                                                                                       | DEIN-DE                                              | 6309ZZ/6307ZZ                                          |                                                                                                                                                                                              |                                                                       |                   |
|                                                                                                                                       | LUBRICANT                                            | GREASE                                                 |                                                                                                                                                                                              |                                                                       |                   |
| COUPLING METHOD <input checked="" type="checkbox"/> DIRECT <input type="checkbox"/> V-BELT                                            |                                                      | TORQUE                                                 |                                                                                                                                                                                              |                                                                       |                   |
| SHAFT                                                                                                                                 |                                                      | NOISE LEVEL                                            |                                                                                                                                                                                              | 82.0                                                                  | dB(A)             |
| EXTENSION SINGLE                                                                                                                      |                                                      | VIBRATION                                              |                                                                                                                                                                                              | 30.0                                                                  | μm                |
| EXTERNAL THRUST                                                                                                                       |                                                      | ALLOWABLE LOAD GD <sup>2</sup> REFERRED TO MOTOR SHAFT |                                                                                                                                                                                              |                                                                       |                   |
| TERMINAL BOX                                                                                                                          |                                                      | (AT DIRECT ON-LINE)                                    |                                                                                                                                                                                              | 48.0                                                                  | kg-m <sup>2</sup> |
| MAIN <input checked="" type="checkbox"/> STEEL <input type="checkbox"/> AL <input type="checkbox"/> CAST                              |                                                      | Motor GD <sup>2</sup>                                  |                                                                                                                                                                                              | 0.3764                                                                | kg-m <sup>2</sup> |
| AUX. <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO                                                              |                                                      | MOTOR APPROX. WEIGHT                                   |                                                                                                                                                                                              | 122.0                                                                 | kg                |
| BOX LOCATION LEFT (Viewed from Drive end)                                                                                             |                                                      | PAINTING                                               | MUNSELL NO.                                                                                                                                                                                  | 7.1 B 4.0/0.9                                                         |                   |
| APPLICATION STANDARDS KS.IEC                                                                                                          |                                                      | THICKNESS                                              |                                                                                                                                                                                              | <input checked="" type="checkbox"/> STANDARD <input type="checkbox"/> | μm                |
| ACCESSORIES (OPTIONAL)                                                                                                                |                                                      |                                                        | SUBMITTAL DRAWINGS                                                                                                                                                                           |                                                                       |                   |
| TEMPERATURE DETECTOR                                                                                                                  |                                                      |                                                        | OUTLINE DIMENSION                                                                                                                                                                            |                                                                       | DW-H-160L-CA      |
| WINDING NO                                                                                                                            |                                                      |                                                        | S-T CURVE                                                                                                                                                                                    |                                                                       | ST-KMI-20HK1      |
| TYPE                                                                                                                                  |                                                      |                                                        | TERMINAL BOX DIMENSION                                                                                                                                                                       |                                                                       | TB-2M95115        |
| BEARING NO                                                                                                                            |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
| TYPE                                                                                                                                  |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
| SPACE HEATER NO                                                                                                                       |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
| RATING                                                                                                                                |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
|                                                                                                                                       |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
|                                                                                                                                       |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
| NOTE                                                                                                                                  |                                                      |                                                        | REMARKS                                                                                                                                                                                      |                                                                       |                   |
| 1. THESE DATA ARE ONLY DESIGN VALUES AND SHALL BE GUARANTEED WITH TOLERANCE OF APPLICATION STANDARDS.                                 |                                                      |                                                        | 1. ABOVE ALL DATA ARE CALCULATED AT 100% VOLTAGE.                                                                                                                                            |                                                                       |                   |
| 2. OTHERS NOT MENTIONED IN THIS SHEET SHALL BE IN ACCORDANCE WITH OTIS STANDARD.                                                      |                                                      |                                                        |                                                                                                                                                                                              |                                                                       |                   |
| FC : FAN COOLED SC : SELF COOLED                                                                                                      |                                                      |                                                        | DATE                                                                                                                                                                                         | PREPARED                                                              | CHECKED           |
|                                                                                                                                       |                                                      |                                                        | 2005-10-28                                                                                                                                                                                   | J.S.PARK                                                              | J.S.PARK          |
|                                                                                                                                       |                                                      |                                                        |                                                                                                                                                                                              |                                                                       | APPROVED          |
|                                                                                                                                       |                                                      |                                                        |                                                                                                                                                                                              |                                                                       | H.T.KIM           |