

**05 SLURRY PUMP MOTOR DATA SHEET**

|   |                     |                                    |
|---|---------------------|------------------------------------|
| 1. Name of motor                              | -                   | Slurry pump motor                  |
| 2. Manufacturer                               | -                   | ABB                                |
| 3. Country of origin                          | -                   | CHINA                              |
| 4. Type/machine code                          | -                   | 3GBA 162 420-ADC M2BAX<br>160MLB 4 |
| 5. Applied standard (characteristics)         | -                   | IEC                                |
| 6. Ratings                                    |                     |                                    |
| (1) Rated output                              | kW                  | 15                                 |
| (2) Service factor                            | -                   | 1.0                                |
| (3) Number of pole                            | -                   | 4                                  |
| (4) Rated speed                               | R.min <sup>-1</sup> | 1463                               |
| (5) Rated voltage                             | V                   | 380                                |
| (6) Number of phases                          | -                   | 3                                  |
| (7) Rated frequency                           | Hz                  | 50                                 |
| (8) Insulation class                          | -                   | F                                  |
| (9) Temperature rise                          | -                   | B                                  |
| (10) Rated duty                               |                     | S1                                 |
| 7. Service Conditions                         | -                   |                                    |
| (1) Starting method                           | -                   | Directly                           |
| (2) Direction of rotation (viewed from DE)    | -                   | CW or CCW                          |
| (3) Reverse rotation (Yes / No)               | -                   | No                                 |
| (4) Location (Indoor / Outdoor)               |                     | Outdoor                            |
| (5) Enclosure IP rating                       | -                   |                                    |
| (a) Motor frame                               | -                   | IP55                               |
| (b) Terminal boxes                            | -                   | IP55                               |
| (6) Installation (Horizontal / Vertical)      |                     | Horizontal                         |
| (7) Design ambient temperature                | °C                  | -20 ~ 40                           |
| (8) Explosion proof (Required / Not required) |                     | Not required                       |
| (9) Noise level (at full-load condition)      | dB (A)              | 66                                 |
| 8. Characteristics                            |                     |                                    |

|                          |   |           |                   |             |                 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|
| Originator<br>CHEC WATER | Identification number<br>TJB56-GNA-E-DAS-0001 | Rev.<br>B | Date<br>31/MAR/19 | Lang.<br>En | Sheet<br>19/102 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|

|   |                   |                         |
|---|-------------------|-------------------------|
| (1) Current                                       |                   |                         |
| (a) Normal current                                | A                 | 30.3                    |
| (b) No-load current                               | A                 | 12.6                    |
| (c) Starting current                              | A                 | 224.22                  |
| (2) Torque  |                   |                         |
| (a) Starting torque                               | %                 | 2.9                     |
| (b) Maximum torque                                | %                 | 3.3                     |
| (3) Slip at rated output                          |                   |                         |
| (4) Efficiencies                                  |                   |                         |
| (a) At 100% load                                  | %                 | 90.6                    |
| (b) At 75% load                                   | %                 | 91                      |
| (c) At 50% load                                   | %                 | 90.9                    |
| (d) At 25% load                                   | %                 |                         |
| (5) Power factor                                  |                   |                         |
| (a) At rated load                                 | %                 | 83                      |
| (b) At starting load                              | %                 | 37                      |
| (6) GD2 coupled with driven equipment             | kg-m <sup>2</sup> | 0.0999555               |
| (7) Starting time with driven equipment           | s                 |                         |
| (8) Allowable number of starts                    | -                 |                         |
| (a) From cold condition per hour                  | -                 |                         |
| (b) From hot condition per hour                   | -                 |                         |
| (c) Minimum time between 2 starts (running state) | min               |                         |
| (d) Minimum time between 2 starts (stop state)    | min               |                         |
| (9) Allowable locked-rotor time                   |                   |                         |
| (a) At cold condition                             | s                 | 27                      |
| (b) At hot condition                              | s                 | 15                      |
| 9. Constructions                                  |                   |                         |
| (1) Stator winding connection (Wye / Delta)       | -                 |                         |
| (2) Type of bearing (DE / NDE)                    | -                 | 6209-2Z/C3 - 6209-2Z/C3 |
| (3) Lubricants                                    |                   |                         |

|                          |   |           |                   |             |                 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|
| Originator<br>CHEC WATER | Identification number<br>TJB56-GNA-E-DAS-0001 | Rev.<br>B | Date<br>31/MAR/19 | Lang.<br>En | Sheet<br>20/102 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|

|   |                   |     |
|---|-------------------|-----|
| (a) Recommended lubricant and brand name            | -                 |     |
| (b) Pouring method                                  | -                 |     |
| (c) Quantity of lubricant for initial filling       | -                 |     |
| (d) Recommended interval for recharging             | -                 |     |
| (e) Recharging quantity                             | -                 |     |
| (f) Location of pouring                             | -                 |     |
| (indicated in the outline drawing)                  |                   |     |
| (4) Bearing cooling water requirement (if required) |                   | NA  |
| (a) Quantity  | m <sup>3</sup> /h | NA  |
| (b) Inlet water temperature                         | °C                |     |
| (c) Required cooling water pressure                 | kPa               |     |
| (d) Type of cooling water                           | -                 |     |
| (5) Water to air heat exchanger (if applied)        |                   |     |
| (a) Quantity of cooling water                       | m <sup>3</sup> /h | NA  |
| (b) Inlet water temperature                         | °C                | NA  |
| (c) Required cooling water pressure                 | kPa               | NA  |
| (d) Type of cooling water                           | -                 | NA  |
| (6) Space heater (AC 220V 1 phase)                  | W                 | NA  |
| (7) Weight  | kg                | 125 |
|   |                   |     |
| 10. Attached document numbers                       |                   |     |
| (1) Motor outline drawing                           | -                 | NA  |
| (2) Terminal box drawings                           | -                 | NA  |
| (a) For main power                                  | -                 | NA  |
| (b) For instruments                                 | -                 | NA  |
| (c) For space heater                                | -                 | NA  |
| (3) Current transformers (for MV motors only)       |                   | NA  |
| (a) Characteristics curves                          | -                 | NA  |
| (b) Outline drawing                                 | -                 | NA  |
| (4) Efficiency curves                               | -                 | NA  |

|                          |   |           |                   |             |                 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|
| Originator<br>CHEC WATER | Identification number<br>TJB56-GNA-E-DAS-0001 | Rev.<br>B | Date<br>31/MAR/19 | Lang.<br>En | Sheet<br>21/102 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|

|  |   |    |
|--|---|----|
| (5) Thermal capability curves  |   | NA |
| (a) At cold condition  | - | NA |
| (b) At hot condition   | - | NA |
| (6) Starting and speed torque characteristics at 80%, 90% and 100% voltage | - | NA |

CONFIDENTIAL

|                          |   |           |                   |             |                 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|
| Originator<br>CHEC WATER | Identification number<br>TJB56-GNA-E-DAS-0001 | Rev.<br>B | Date<br>31/MAR/19 | Lang.<br>En | Sheet<br>22/102 |
|--------------------------|---|-----------|-------------------|-------------|-----------------|