

## 24 WASTEWATER DISCHARGE PUMP MOTOR DATA SHEET

|  |                   |                                 |
|--|-------------------|---------------------------------|
| 1. Name of motor                           | -                 | Wastewater discharge pump motor |
| 2. Manufacturer                            | -                 | SIEMENS                         |
| 3. Country of origin                       | -                 | CHINA                           |
| 4. Type/machine code                       | -                 | 1LE0001-2BA22-1GA4              |
| 5. Applied standard (characteristics)      | -                 | IEC                             |
| 6. Ratings                                 |                   |                                 |
| (1) Rated output                           | kW                | 45                              |
| (2) Service factor                         | -                 | 1                               |
| (3) Number of pole                         | -                 | 2                               |
| (4) Rated speed                            | min <sup>-1</sup> | 2900                            |
| (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                              |
| (3) Reverse rotation (Yes / No)            | -                 | No                              |
| (4) Location (Indoor / Outdoor)            |                   | Outdoor                         |
| (5) Enclosure IP rating                    | -                 | IP55                            |
| (a) Motor frame                            | -                 | IP55                            |
| (b) Terminal boxes                         | -                 | IP55                            |
| (6) Installation (Horizontal / Vertical)   |                   | Vertical                        |
| (7) Design ambient temperature             | °C                | -20~+40                         |

|            |                       |      |           |       |        |
|------------|-----------------------|------|-----------|-------|--------|
| Originator | Identification number | Rev. | Date      | Lang. | Sheet  |
| CHEC WATER | TJB56-GNA-E-DAS-0001  | B    | 31/MAR/19 | En    | 97/102 |

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|   |                   |  |              |
|---|-------------------|--|--------------|
| (8) Explosion proof (Required / Not required)     |                   |  | Not required |
| (9) Noise level (at full-load condition)          | dB (A)            |  | 74dB(A)      |
| 8. Characteristics                                |                   |  |              |
| (1) Current                                       |                   |  |              |
| (a) Normal current                                | A                 |  | 118          |
| (b) No-load current                               | A                 |  | 28           |
| (c) Starting current                              | A                 |  | 664          |
| (2) Torque  |                   |  |              |
| (a) Starting torque                               | %                 |  | 2.5          |
| (b) Maximum torque                                | %                 |  | 3.1          |
| (3) Slip at rated output                          |                   |  | 0.24         |
| (4) Efficiencies                                  |                   |  |              |
| (a) At 100% load                                  | %                 |  | 93.2         |
| (b) At 75% load                                   | %                 |  | 93.2         |
| (c) At 50% load                                   | %                 |  | 93.4         |
| (d) At 25% load                                   | %                 |  | 93.3         |
| (5) Power factor                                  |                   |  |              |
| (a) At rated load                                 | %                 |  |              |
| (b) At starting load                              | %                 |  |              |
| (6) GD2 coupled with driven equipment             | kg-m <sup>2</sup> |  | 0.24         |
| (7) Starting time with driven equipment           | s                 |  | 1-2          |
| (8) Allowable number of starts                    |                   |  |              |
| (a) From cold condition per hour                  | -                 |  | 2            |
| (b) From hot condition per hour                   | -                 |  | 1            |
| (c) Minimum time between 2 starts (running state) | min               |  | 0.1          |
| (d) Minimum time between 2 starts (stop state)    | min               |  | 0.1          |
| (9) Allowable locked-rotor time                   |                   |  |              |
| (a) At cold condition                             | s                 |  | 5            |

|            |                       |      |           |       |        |
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|   |                   |                     |
|---|-------------------|---------------------|
| (b) At hot condition  | s                 | 5                   |
| 9. Constructions  |                   |                     |
| (1) Stator winding connection (Wye / Delta)                   | -                 | Wye                 |
| (2) Type of bearing (DE / NDE)                                | -                 | 6313 C3             |
| (3) Lubricants  |                   |                     |
| (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<br>(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                 | 60                  |
| (7) Weight  | kg                | Later               |
| 10. Attached document numbers                                 |                   |                     |
| (1) Motor outline drawing                                     | -                 | Refer to attachment |
| (2) Terminal box drawings                                     | -                 | NA                  |
| (a) For main power  | -                 | NA                  |

|            |                       |      |           |       |        |
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|  |   |    |
|--|---|----|
| (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 |
| (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 |

|                          |   |           |                   |             |                  |
|--------------------------|---|-----------|-------------------|-------------|------------------|
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