

**SECTION 5**

---

**Motor Information for Gravity Filter  
Backwash Blower A/B**

00GNB62AN101

00GNB63AN101



**BOUSTEAD SALCON WATER SOLUTIONS PTE LTD**

---

## Motor Data sheets

|   |                   |  |
|---|-------------------|--|
| <b>1. Name of motor</b>                       | -                 | GRAVITY FILTER<br>BACKWASH BLOWER<br>MOTOR |
| <b>2. Manufacturer</b>                        | -                 | TECO                                       |
| <b>3. Country of origin</b>                   | -                 | MALAYSIA                                   |
| <b>4. Type/machine code</b>                   | -                 | SQUIRREL CAGE<br>INDUCTION MOTOR<br>AESV2S |
| <b>5. Applied standard (characteristics)</b>  | -                 | IEC 60034-1                                |
| <b>6. Ratings</b>                             |                   |  |
| (1) Rated output                              | kW                | 4kW  |
| (2) Service factor                            | -                 | SF 1.0                                     |
| (3) Number of pole                            | -                 | 4 POLES                                    |
| (4) Rated speed                               | min <sup>-1</sup> | 1450 RPM                                   |
| (5) Rated voltage                             | V                 | 380V                                       |
| (6) Number of phases                          | -                 | 3 PHASE                                    |
| (7) Rated frequency                           | Hz                | 50HZ                                       |
| (8) Insulation class                          | -                 | CLASS F                                    |
| (9) Temperature rise                          | -                 | CLASS B                                    |
| (10) Rated duty                               | -                 | S1   |
| <b>7. Service Conditions</b>                  |                   |  |
| (1) Starting method                           | -                 | DOL  |
| (2) Direction of rotation (viewed from DE)    | -                 | CW   |
| (3) Reverse rotation (Yes / No)               | -                 | NO   |
| (4) Location (Indoor / Outdoor)               | -                 | INDOOR                                     |
| (5) Enclosure IP rating                       |                   | IP55                                       |
| (a) Motor frame                               | -                 | IP55                                       |
| (b) Terminal boxes                            | -                 | IP55                                       |
| (6) Installation (Horizontal / Vertical)      | -                 | HORIZONTAL                                 |
| (7) Design ambient temperature                | °C                | -15 ~ 40 degC                              |
| (8) Explosion proof (Required / Not required) | -                 | NOT REQUIRED                               |
| (9) Noise level (at full-load condition)      | dB (A)            | 72 dBA                                     |
| <b>8. Characteristics</b>                     |                   |  |
| (1) Current                                   |                   |  |
| (a) Normal current                            | A                 | 8.26                                       |

|   |                   |   |
|---|-------------------|---|
| (b) No-load current                                 | A                 |   |
| (c) Starting current                                | A                 | 53.69                                     |
| (2) Torque  |                   |   |
| (a) Starting torque                                 | %                 | 220                                       |
| (b) Maximum torque                                  | %                 | 300                                       |
| (3) Slip at rated output                            |                   |   |
| (4) Efficiencies                                    |                   |   |
| (a) At 100% load                                    | %                 | 86.6                                      |
| (b) At 75% load                                     | %                 | 87.6                                      |
| (c) At 50% load                                     | %                 | 87.5                                      |
| (d) At 25% load                                     | %                 |   |
| (5) Power factor                                    |                   |   |
| (a) At rated load                                   | %                 | 85%                                       |
| (b) At starting load                                | %                 | 75%                                       |
| (6) GD2 coupled with driven equipment               | kg-m <sup>2</sup> | 0.083                                     |
| (7) Starting time with driven equipment             | s                 | 1 Second (D.O.L)                          |
| (8) Consecutive number of starts                    |                   |   |
| (a) From cold condition per hour                    | -                 | 3   |
| (b) From hot condition per hour                     | -                 | 2   |
| (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                 | 15 SEC                                    |
| (b) At hot condition                                | s                 | 6 SEC                                     |
| <b>9. Constructions</b>                             |                   |   |
| (1) Stator winding connection (Wye / Delta)         | -                 | DELTA                                     |
| (2) Type of bearing (DE / NDE)                      | -                 | 6206ZZC3 / 6206ZZC3                       |
| (3) Lubricants                                      |                   |   |
| (a) Recommended lubricant and brand name            | -                 | Mineral Oil, Li-Base Grease (MULTEMP SRL) |
| (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) |                   | NOT REQUIRED                              |
| (a) Quantity  | m <sup>3</sup> /h |   |
| (b) Inlet water temperature                         | °C                |   |
| (c) Required cooling water pressure                 | kPa               |   |
| (d) Type of cooling water                           | -                 |   |

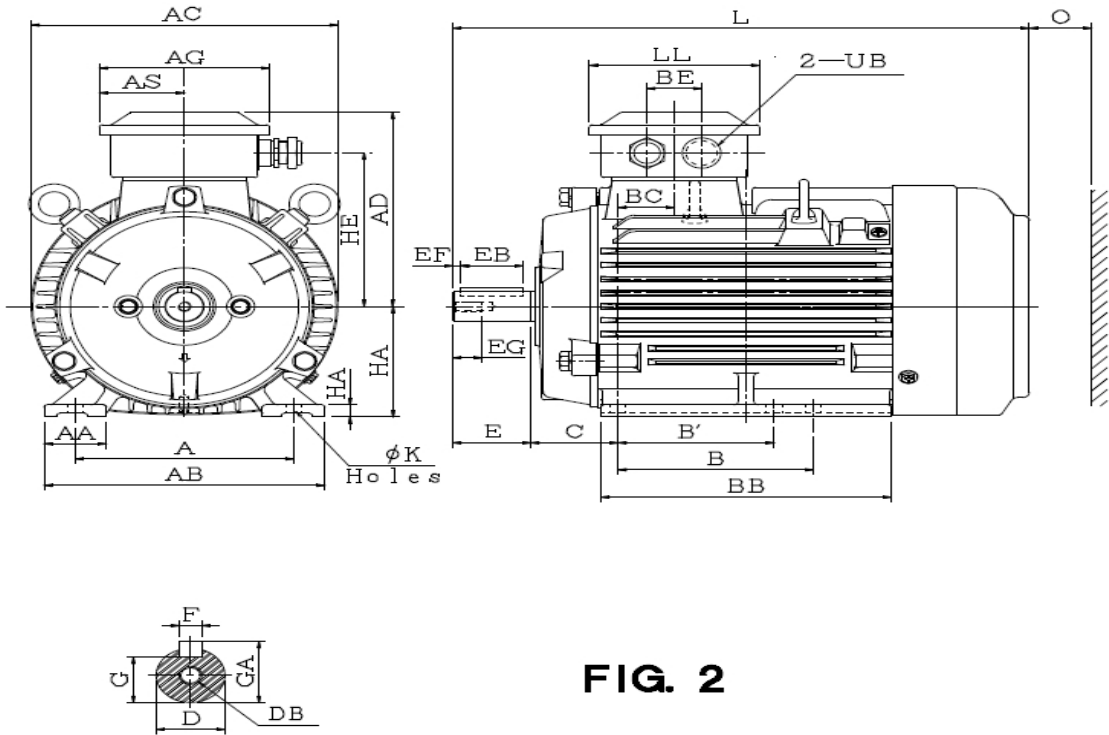
|   |                   |             |
|---|-------------------|-------------|
| (5) Water to air heat exchanger (if applied)                                  | m <sup>3</sup> /h | NOT APPLIED |
| (a) Quantity of cooling water   | °C                |             |
| (b) Inlet water temperature   | kPa               |             |
| (c) Required cooling water pressure   | -                 |             |
| (d) Type of cooling water   | W                 |             |
| (6) Space heater (AC 220V 1 phase)  | kg                | NO          |
| (7) Weight  |                   | 53KGS       |
| <b>10. Attached document numbers</b>  |                   |             |
| (1) Motor outline drawing   | -                 | SEE PAGE 41 |
| (2) Terminal box drawings   |                   |             |
| (a) For main power  | -                 |             |
| (b) For instruments   | -                 |             |
| (c) For space heater  | -                 |             |
| (3) Current transformers (for MV motors only)                                 |                   |             |
| (a) Characteristics curves  | -                 |             |
| (b) Outline drawing   | -                 |             |
| (4) Efficiency curves   | -                 |             |
| (5) Thermal capability curves   |                   |             |
| (a) At cold condition   | -                 |             |
| (b) At hot condition  | -                 |             |
| (6) Starting and speed torque characteristics at 80%,<br>90% and 100% voltage | -                 |             |

# OUTLINE DIMENSIONS

DATE 2017/3/23

| MODEL  | OUTPUT | POLE | TIME RATING          | VOLTAGE | Hz | SYN. SPEED<br>R.P.M. |
|--------|--------|------|----------------------|---------|----|----------------------|
|        | KW     |      |                      | V       |    |                      |
| AESV2S | 4      | 4    | Continuous<br>Rating | 380     | 50 | 1500                 |

## 10.1 MOTOR OUTLINE DRAWING



**FIG. 2**

| FRAME NO. | A    | AA  | AB | AC  | AD  | AG  | AS  | B    | B'  | BA  | BA' | BB  | BC | BE | C  | H   |
|-----------|------|-----|----|-----|-----|-----|-----|------|-----|-----|-----|-----|----|----|----|-----|
|           | 112M | 190 | 45 | 235 | 235 | 193 | 125 | 62.5 | 140 | --- |     | 186 | 28 | 40 | 70 | 112 |

| SHAFT EXTENSION |    |     |    |    |    |   |    |    | FLANGE DIMENSION |   |   |   |   |    |    | HA | HE    |
|-----------------|----|-----|----|----|----|---|----|----|------------------|---|---|---|---|----|----|----|-------|
| D               | E  | DB  | EB | EF | EG | F | G  | GA | M                | N | P | S | T | LA | LE |    |       |
| 28              | 60 | M10 | 50 | 5  | 22 | 8 | 24 | 31 |                  |   |   |   |   |    |    | 13 | 153.5 |

| K  | L     | LL  | O  | UB      | B1 | D. E. BEARING | N.D.E. BEARING | APPROX. WEIGHT KG | VIBRATION mm/sec | SOUND POWER LEVEL dBA/1M |
|----|-------|-----|----|---------|----|---------------|----------------|-------------------|------------------|--------------------------|
| 12 | 412.5 | 125 | 50 | M25X1.5 |    | 6306ZZC3      | 6306ZZC3       | 53                | 1.6              | 72                       |

NOTE:

**PRELIMINARY**

DATE: 2017/3/23

|       |       |           |
|-------|-------|-----------|
| APPD. | Imtan | 4/25/2018 |
| CHKD. | Imtan | 4/25/2018 |
| DWN.  | Imtan | 4/25/2018 |

TECO Electric & Machinery Co., Ltd.

DWG NO.  
TEK20180425007  
PN Ver:03