

# OUTLINE 3-PHASE INDUCTION MOTOR

TOTALLY ENCLOSED FAN  
COOLED,SQUIRREL CAGE  
ROTOR

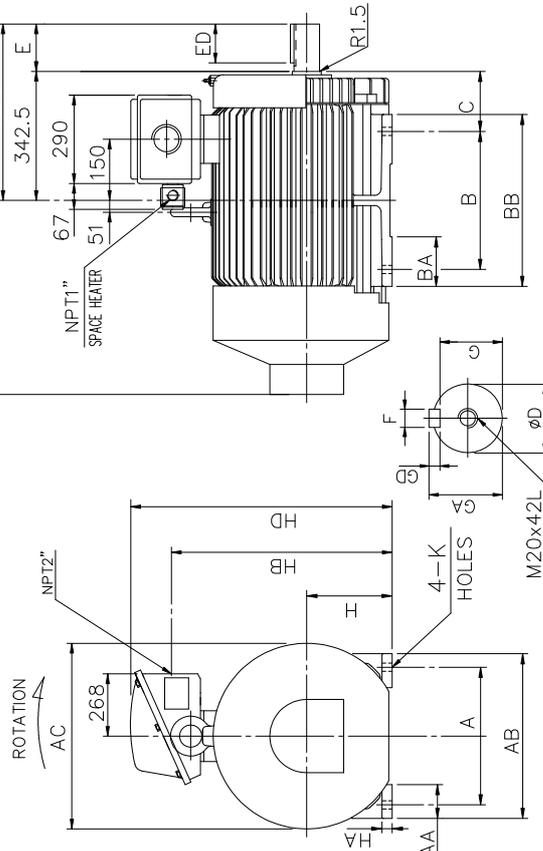
(INDOOR)

FILE NO:  
CUSTOMER: TOJ  
PO. NO:  
ORDER NO: 1010123299-10

| OUTPUT | POLE | SYN. SPEED | VOLT. | FREQ. | TIME RATING | MODEL | FRAME NO. |
|--------|------|------------|-------|-------|-------------|-------|-----------|
| 75kW   | 2P   | 3000r.p.m  | 380V  | 50Hz  | S1          | FPFC  | 250MT     |

\*\* IE2 EFFICIENCY  
\*\* With space heater(1ø 220V 100W)  
\*\* PAINT : ZINC PRIMER 80um, EPOXY INTERMEDIATE 150um, PU FINISH 40um  
\*\* COLOR: RAL 5021  
\*\* NOISE LEVEL: 79 dBA AT 1 METER ON NO-LOAD  
\*\* WITH TERMINAL BLOCK  
\*\* FOR DIRECT COUPLING  
\*\* INSULATION CLASS F  
\*\* IP44

APPLICATION  
STATOR COOLING WATER PUMP MOTOR



| A   | B   | C   | H   | ØK | L    | AA  | AB  | AC  | AD | AE | BA  | BB  | HA |
|-----|-----|-----|-----|----|------|-----|-----|-----|----|----|-----|-----|----|
| 406 | 349 | 168 | 250 | 24 | 1130 | 100 | 486 | 560 | —  | —  | 150 | 449 | 35 |

| HD  | HB  | SHAFT END |     |    |    | BEARING NO. |    | APPROX WEIGHT |         |         |       |
|-----|-----|-----------|-----|----|----|-------------|----|---------------|---------|---------|-------|
|     |     | ØD        | E   | ED | F  | G           | GA |               | D.E     | * O.D.E |       |
| 785 | 668 | 55        | 110 | 90 | 16 | 49          | 59 | 10            | 6.313C3 | VL0241  | 620kg |

## TJB 5&6 Equipment No. (KKS No.) List

Note: "5", shall be "5" for Unit5 or "6" for Unit6.

| Application     | Description  |
|-----------------|--|
| SCWP B          | *0MKF10AP020-M01<br>STATOR COOLING WATER PUMP B MOTOR                            |
| SCWP B MAIN T/B | *0MKF10AP020-M01-X01<br>STATOR COOLING WATER PUMP B MOTOR MAIN TERMINAL BOX      |
| SCWP B AUX. T/B | *0MKF10AP020-M01-X02<br>STATOR COOLING WATER PUMP B MOTOR AUXILIARY TERMINAL BOX |



| DESIGNED | S.C.CHOU | APR.23.2017 | DWG. NO: AS-071189 02 |
|----------|----------|-------------|-----------------------|
| CHECKED  | L.J.LEE  | APR.23.2017 | 3RD ANGLE PROJECTION  |
| APPROVED | L.J.LEE  | APR.23.2017 | DIMENSIONS IN mm      |

## Motor Data Sheet

| No.        | Description  | Unit              | Manufacturer's Design Data                |
|------------|--|-------------------|---|
| 1.         | <b>Name of Motor</b>   | -                 | STATOR COOLING<br>WATER PUMP A/B<br>MOTOR |
| 2.         | <b>Manufacturer</b>  | -                 | TATUNG                                    |
| 3.         | <b>Country of Origin</b>                                     | -                 | TAIWAN                                    |
| 4.         | <b>Type/Machine Code</b>                                     | -                 | TEFC                                      |
| 5.         | <b>Applied Standard (characteristics)</b>                    | -                 | IEC 60034                                 |
| 6.         | <b>Ratings</b>   |                   |   |
| 6. (1)     | Rated output   | kW                | 75  |
| 6. (2)     | Service factor   | -                 | 1.0                                       |
| 6. (3)     | Number of pole   | -                 | 2   |
| 6. (4)     | Rated speed  | min <sup>-1</sup> | 2960                                      |
| 6. (5)     | Rated voltage  | V                 | 380                                       |
| 6. (6)     | Number of phases   | -                 | 3   |
| 6. (7)     | Rated frequency  | Hz                | 50  |
| 6. (8)     | Insulation class   | -                 | F   |
| 6. (9)     | Temperature rise   | -                 | B   |
| 6. (10)    | Rated duty   | -                 | S1  |
| 7.         | <b>Service Conditions</b>                                    |                   |   |
| 7. (1)     | Starting method  | -                 | Direct-On-Line                            |
| 7. (2)     | Direction of rotation (viewed from DE (Drive End))           | -                 | CCW                                       |
| 7. (3)     | Reverse rotation (Yes / No)                                  | -                 | YES                                       |
| 7. (4)     | Location (Indoor / Outdoor)                                  | -                 | INDOOR                                    |
| 7. (5)     | Enclosure IP rating  |                   |   |
| 7. (5) (a) | Motor frame  | -                 | IP44                                      |
| 7. (5) (b) | Terminal boxes   | -                 | IP44                                      |
| 7. (6)     | Installation (Horizontal / Vertical)                         | -                 | HORIZONTAL                                |
| 7. (7)     | Design ambient temperature                                   | deg C             | 40  |
| 7. (8)     | Explosion proof (Yes / No)                                   | -                 | NO  |
| 7. (9)     | Noise level (at full-load condition, at 1m from motor frame) | dB(A)             | 82  |
| 7. (10)    | Winding resistance   | Ω                 | 0.0345 (@20°C)                            |
| 8.         | <b>Characteristics</b>                                       |                   |   |
| 8. (1)     | Current  |                   |   |
| 8. (1) (a) | Normal current   | A                 | 138                                       |
| 8. (1) (b) | No-load current  | A                 | 34.5                                      |
| 8. (1) (c) | Starting current   | A                 | 965                                       |
| 8. (2)     | Torque   |                   |   |
| 8. (2) (a) | Starting torque  | %                 | 150                                       |
| 8. (2) (b) | Maximum torque   | %                 | 220                                       |
| 8. (3)     | Slip at rated output   | %                 | 1.33                                      |
| 8. (4)     | Efficiencies   |                   |   |
| 8. (4) (a) | At 100% load   | %                 | 93.8                                      |
| 8. (4) (b) | At 75% load  | %                 | 93.8                                      |
| 8. (4) (c) | At 50% load  | %                 | 93.0                                      |
| 8. (4) (d) | At 25% load  | %                 | 89.0                                      |
| 8. (5)     | Power factor   |                   |   |
| 8. (5) (a) | At rated load  | %                 | 88.0                                      |
| 8. (5) (b) | At starting load   | %                 | 18.9                                      |
| 8. (6)     | GD <sup>2</sup> coupled with driven equipment                | kg-m <sup>2</sup> | 4.754                                     |
| 8. (7)     | Starting time with driven equipment                          | sec               | 2   |

## Motor Data Sheet

| No.        | Description  | Unit              | Manufacturer's Design Data |
|------------|--|-------------------|----------------------------|
| 8. (8)     | Consecutive numbers of motor starting                                  |                   |                            |
| 8. (8) (a) | From cold condition (consecutive)                                      | -                 | 3                          |
| 8. (8) (b) | From hot condition (consecutive)                                       | -                 | 2                          |
| 8. (8) (c) | Minimum time between 2 starts (running state)                          | min               | -                          |
| 8. (8) (d) | Minimum time between 2 starts (stop state)                             | min               | -                          |
| 8. (9)     | Allowable locked-rotor time  |                   |                            |
| 8. (9) (a) | At cold condition  | sec               | 12                         |
| 8. (9) (b) | At hot condition   | sec               | 7                          |
| 9.         | <b>Constructions</b>   |                   |                            |
| 9. (1)     | Stator winding connection (Wye / Delta)                                | -                 | DELTA                      |
| 9. (2)     | Type of bearing  |                   |                            |
|            | Bearing of DE (Drive End)  | -                 | BALL                       |
|            | Bearing of NDE (Non Drive End)   | -                 | BALL                       |
| 9. (3)     | Lubricants   |                   |                            |
| 9. (3) (a) | Recommended lubricant and brand name                                   | -                 | SHELL GADUS S2 V100<br>2   |
| 9. (3) (b) | Pouring method (if applicable)   | -                 | GRAVITY                    |
| 9. (3) (c) | Quantity of lubricant for initial filling (if applicable)              | g                 | 100                        |
| 9. (3) (d) | Recommended interval for recharging (if applicable)                    | hr                | 1200                       |
| 9. (3) (e) | Recharging quantity (if applicable)                                    | g                 | 30                         |
| 9. (3) (f) | Location of pouring (indicated in the outline drawing) (if applicable) | -                 | TOP                        |
| 9. (4)     | Bearing cooling water requirement (if required)                        |                   | N/A                        |
| 9. (4) (a) | Quantity (if required)   | m <sup>3</sup> /h | -                          |
| 9. (4) (b) | Inlet water temperature (if required)                                  | deg C             | -                          |
| 9. (4) (c) | Required cooling water pressure (if required)                          | kPa               | -                          |
| 9. (4) (d) | Type of cooling water (if required)                                    | -                 | -                          |
| 9. (5)     | Water to air heat exchanger (if applicable)                            |                   | N/A                        |
| 9. (5) (a) | Quantity of cooling water (if applicable)                              | m <sup>3</sup> /h | -                          |
| 9. (5) (b) | Inlet water temperature (if applicable)                                | deg C             | -                          |
| 9. (5) (c) | Required cooling water pressure (if applicable)                        | kPa               | -                          |
| 9. (5) (d) | Type of cooling water (if applicable)                                  | -                 | -                          |
| 9. (6)     | Space heater (AC 220V 1 phase) (if applicable)                         | W                 | 100                        |
| 9. (7)     | Weight   | kg                | 620                        |
| 10.        | <b>Related Document Numbers</b>  |                   |                            |
| 10. (1)    | Motor outline drawing  | -                 | AS071189/AS071190          |
| 10. (2)    | Terminal box drawings  |                   | -                          |
| 10. (a)    | For main power   | -                 | N/A                        |
| 10. (b)    | For instruments  | -                 | N/A                        |
| 10. (c)    | For space heater   | -                 | N/A                        |
| 10. (3)    | Current transformers (for MV motors only)                              |                   | N/A                        |
| 10. (a)    | Characteristics curves (for MV motors only)                            | -                 | -                          |
| 10. (b)    | Outline drawing (for MV motors only)                                   | -                 | -                          |
| 10. (4)    | Efficiency curves  | -                 | N/A                        |
| 10. (5)    | Thermal capability curves  |                   | N/A                        |
| 10. (a)    | At cold condition  | -                 | -                          |
| 10. (b)    | At hot condition   | -                 | -                          |
| (6)        | Starting and speed torque characteristics at 80, 90 and 100 % voltage  | -                 | N/A                        |