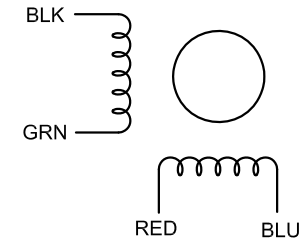


| SPECIFICATION   | CONNECTION | BIPOLAR     |
|---|------------|-------------|
| VOTAGE(VOC)   |            | 3.20        |
| AMPS/PHASE  |            | 2.80        |
| RESISTANCE/PHASE(Ohms)@25°C   |            | 1.13±10%    |
| INDUCTANCE/PHASE(mH)@1KHz   |            | 5.40±20%    |
| HOLDING TORQUE w/o GEARBOX(Nm)[lb-in]   |            | 1.89[16.73] |
| GEAR RATIO  |            | 20.00       |
| EFFICIENCY  |            | 70.00%      |
| STEP ANGLE w/o GEARBOX(°)   |            | 1.80        |
| BACKLASH@NO-LOAD  |            | <=3°        |
| MAX.PERMISSIBLE TORQUE(Nm)  |            | 5.00        |
| WEIGHT(Kg)[lb]  |            | 1.50[3.31]  |
| ROTOR INERTIA w/o GEARBOX(g-cm²)  |            | 480.00      |
| INSULATION RESISTANCE 100 Mohm (UNDER NORMAL TEMPERATURE AND HUMIDITY )           |            |             |
| DIELECTRIC STRENGTH 500VAC FOR 1MIN.(BETWEEN THE MOTOR COILS AND THE MOTOR CASE ) |            |             |
| TEMPERATURE RISE:MAX.80°C ( MOTOR STANDSTILL;FOR 2PHASE ENERGIZED )               |            |             |
| AMBIENT TEMPERATURE -10°C~50°C[14°F~122°F]  |            |             |
| INSULATION CLASS B 130°C[266°F]   |            |             |

| TYPE OF CONNECTION (EXTERN) |         | MOTOR |         |
|-----------------------------|---------|-------|---------|
| PIN NO                      | BIPOLAR | LEADS | WINDING |
| 1                           | A —     | BLK   | A       |
| 2                           | A\ —    | GRN   | A\      |
| 3                           | B —     | RED   | B       |
| 4                           | B\ —    | BLU   | B\      |

FULL STEP 2 PHASE-Ex. ,  
WHEN FACING MOUNTING END (X)

| STEP | A | A\ | B | B\ |   |     |
|------|---|----|---|----|---|-----|
| 1    | + | +  | - | -  | ↓ | CCW |
| 2    | - | +  | + | -  |   | ↑   |
| 3    | - | -  | + | +  | ↓ | CW  |
| 4    | + | -  | - | +  |   | ↑   |



|       |           |      |
|-------|-----------|------|
| APVD  |           |      |
| CHKD  |           |      |
| 1:1.5 | DRN       |      |
| SCALE | SIGNATURE | DATE |

STEPPER MOTOR

23HS30-2804S-SG20