

DATA SHEET

Premium Efficiency Motor: **MTSP-005-3BD36**

60 Hz

Document Generated: 22-Sep-2021
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Customer:

MOTOR INFORMATION

| | |
|-------------------------|--------------------------------|
| HP | 5 |
| RPM | 3600 |
| Phase | 3 |
| Frequency | 60 |
| Voltage | 230/460 |
| Frame Size | 184TC |
| Enclosure | TEFC |
| Degree of Protection | IP69K |
| Service Factor | 1.15 |
| Poles | 2 |
| Full Load Speed | 3525 |
| Insulation Class | F |
| Temp Rise | 80°C |
| NEMA Code Letter | J |
| Duty Cycle | S1 |
| Slip | 2.08% |
| NEMA Design | B |
| Moment of Inertia | 0.26 lb.ft.^2 |
| Locked Rotor Time (Hot) | 12 seconds |
| Sound Pressure Level | 78 dB(A) |
| Number of Starts | 10 |
| Max Ambient Temperature | 40° C |
| Max Elevation | 1000 m.a.s.l (3300 f.a.s.l) |
| Mounting | F1 |
| Rotation | Bidirectional |
| Area of Classification | Div.2 Class I, Gr. A,B,C&D T2B |
| Inverter Rating | 10:1 CT/20:1 VT |
| Standard | NEMA MG1, UL1004 |
| Approvals | CSA,UL,CE |

EFFICIENCY/POWER FACTOR

| LOAD | EFF | P. F. |
|------|--------|-------|
| 100% | 88.5 % | 0.91 |
| 75% | 89.0 % | 0.86 |
| 50% | 88.0 % | 0.78 |

TORQUE

| FULL LOAD | LRT | BDT |
|------------|-------|-------|
| 7.3 lb.ft. | 225 % | 280 % |

AMPERAGE INFORMATION

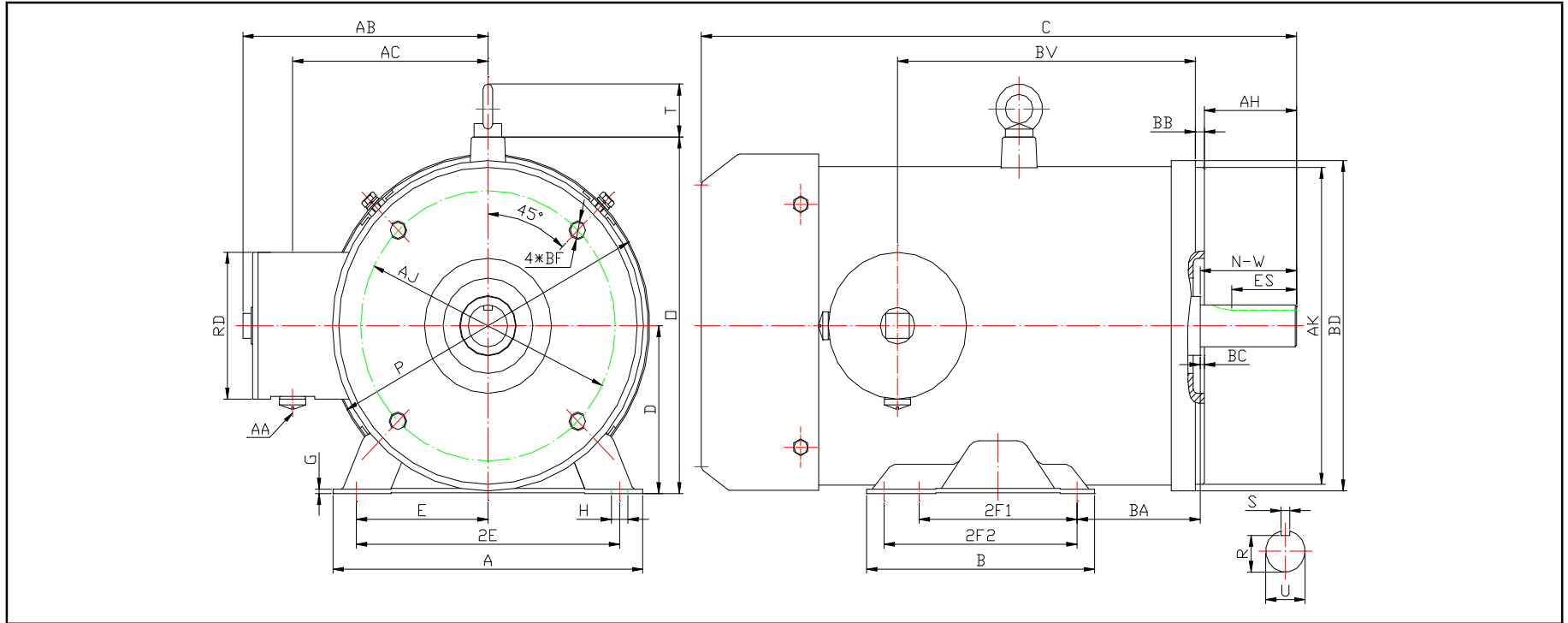
| | 230V | 460V |
|-------------------|------|------|
| Full Load Amps | 12.2 | 6.1 |
| Locked Rotor Amps | 92 | 46 |
| No Load Current | 4.4 | 2.2 |
| Usable at 208V | 13 | |

BEARING INFORMATION

| | |
|-------------------------|------------------|
| DE Bearing | 6308 2RS |
| ODE Bearing | 6306 2RS |
| Grease Type | Mobil Polyrex EM |
| DE Regreasing Interval | -- Hours |
| ODE Regreasing Interval | -- Hours |
| Grease Quantity | -- |

ADDITIONAL DATA

| | |
|--------------------|---------------------|
| F2 Suitable | No |
| Shaft Material | 304 Stainless Steel |
| Connection Diagram | 9 Lead 2Y/Y |
| Approximate Weight | 95 lbs. |



DIMENSIONS - INCHES

| MOUNTING | | | | | A | B | C | D | G | T | P | O | BC | AB |
|----------|-----|-----|-----------|-----|-----|-----|-------|-----|-------|----|------|------|------|------|
| E | 2F1 | 2F2 | H | BA | | | | | | | | | | |
| 3.75 | 4.5 | 5.5 | 0.71*0.47 | 3.5 | 8.8 | 6.5 | 17.00 | 4.5 | 0.118 | -- | 9.25 | 6.98 | 0.12 | 7.00 |

| SHAFT & KEY | | | | | |
|-------------|------|-------|------|-------|------|
| S | ES | R | N-W | U | AH |
| 0.25 | 1.78 | 0.986 | 2.75 | 1.125 | 2.62 |

| TERMINAL BOX | | | | |
|--------------|----|------|------|-----|
| AA | AB | AC | RD | BV |
| 1/2 | 7 | 5.55 | 3.95 | 8.5 |

| FLANGE | | | | |
|--------|------|------|-----------|------|
| AK | BD | AJ | BF | BB |
| 8.5 | 8.85 | 7.25 | (4*)/2-13 | 0.25 |

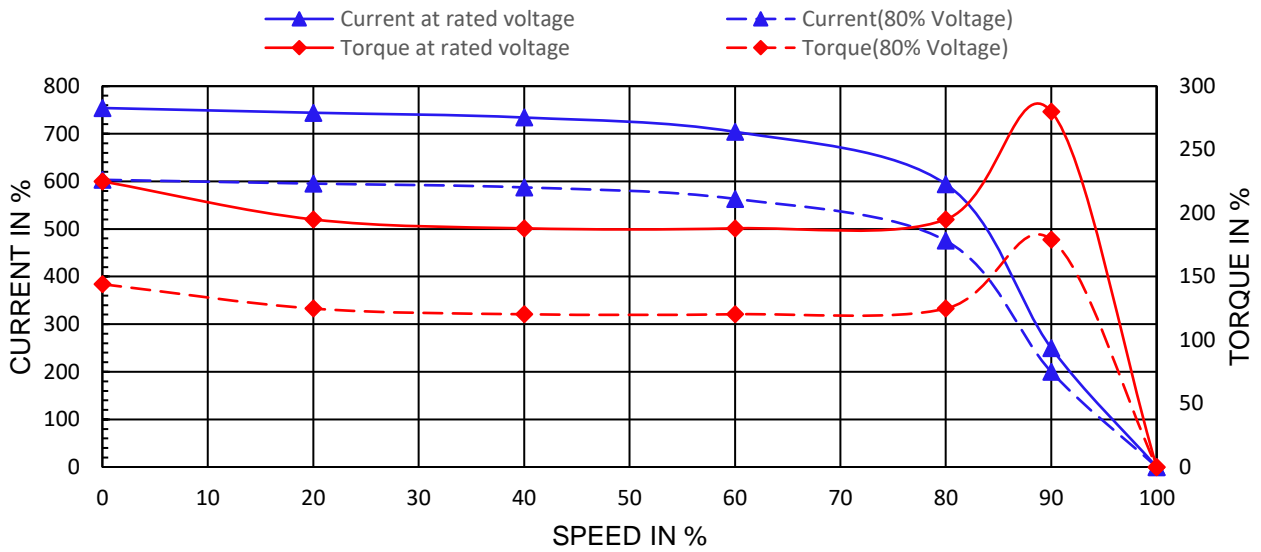
PERFORMANCE CURVES

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| | | | | | |
|--------------------|------|---------|------------|------|-------------------|
| Motor Type | MTS | | FL Speed | 3525 | |
| Output Rating (HP) | 5 | | LRT (%FLT) | 225 | 460 volt FLA 6.1 |
| Full Load Torque | 7.3 | lb.ft | BDT (%FLT) | 280 | 230 volt FLA 12.2 |
| Rotor Wk^2 | 0.26 | lb-ft^2 | | | |

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F. & CURRENT CURVE

