



**PERFORMANCE DATA SHEET
NEMA PREMIUM NR CAN NEMA 12 - 12**

Catalogue #: MQSP-2002TL

| HP | kW | Voltage | S.F. @ 60Hz | Efficiency | Power Factor | Frame | Design | L.R. Amps |
|----|-------|---------|-------------|------------|--------------|-------|--------|-----------|
| 20 | 14,92 | 230/460 | 1,15 | 91,0% | 0,895 | 256TC | B | 145 |

| 60 Hz | | | | | | | | |
|-------|-----|-----|-----|-----|-----|-----|------|----------|
| FLA | | | | | | | Code | F.L. RPM |
| 208 | 230 | 416 | 460 | 480 | 575 | 600 | | |
| / | 46 | / | 23 | / | / | / | G | 3530 |

| 50 Hz | | | | | | | | |
|-------|-----|-----|-------------|------------|--------------|------|----------|--|
| FLA | | | S.F. @ 50Hz | Efficiency | Power Factor | Code | F.L. RPM | |
| 190 | 380 | 415 | | | | | | |
| 56,0 | 28 | / | 1,00 | 89,0% | 0,91 | G | 2930 | |

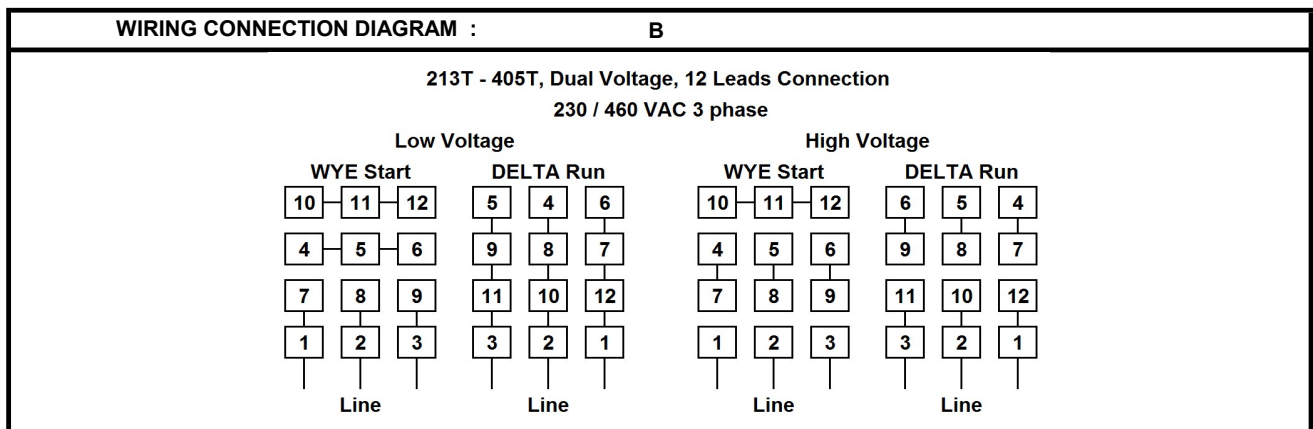
| Wgt. Lbs | PH | Duty | Insul. Class | Amb. | Elevation | Temp. Rise° C |
|----------|----|-------|--------------|------|-----------------|---------------|
| 422 | 3 | Cont. | F | 40°C | 1000M (3300 Ft) | 50 |

| % Efficiency | | % Power Factor | | Torque | | Winding Resist. Ω | Safe Cold Start (Secs) |
|--------------|-------|----------------|------|------------------|------|-------------------|------------------------|
| Full Load: | 91,0% | Full Load: | 0,89 | Full Load Ft/Lbs | 29,8 | | |
| 3/4 Load: | 93,2% | 3/4 Load: | 0,85 | Locked Rotor % | 170 | | |
| 1/2 Load: | 92,9% | 1/2 Load: | 0,78 | Break Down % | 240 | 0,42 | 12 |

| Rotor Inertia Wk2 Lb-Ft2 | Max Load Inertia Wk2 Lb-Ft2 | Shaft Material | Frame Material | DE Bracket Type | ODE Bracket Type | Enclosure | NEMA Rating | Lead Wire Size |
|--------------------------|-----------------------------|----------------|-----------------|-----------------|------------------|-----------|-------------|----------------|
| 2,37 | 142 | 304SS | Stainless Steel | | | TEFC | IP69K | 12AWG |

| Ball Bearings | | Grease | Mount Type | Orientation | Paint | Sound Pressure @ 3FT | Sound Power |
|---------------|------|-----------------|------------|-------------|-------|----------------------|-------------|
| DE | ODE | | | | | | |
| 6309 | 6309 | Sealed Bearings | Foot | Horizontal | - | 80 | 89 |

| Inverter Duty. Motor meets MG1 parts 31.4.4.2 | Constant Torque Range | Variable Torque Range | Constant HP RPM |
|--|-----------------------|-----------------------|-----------------|
| | 10:1 | 20:1 | 5400 |

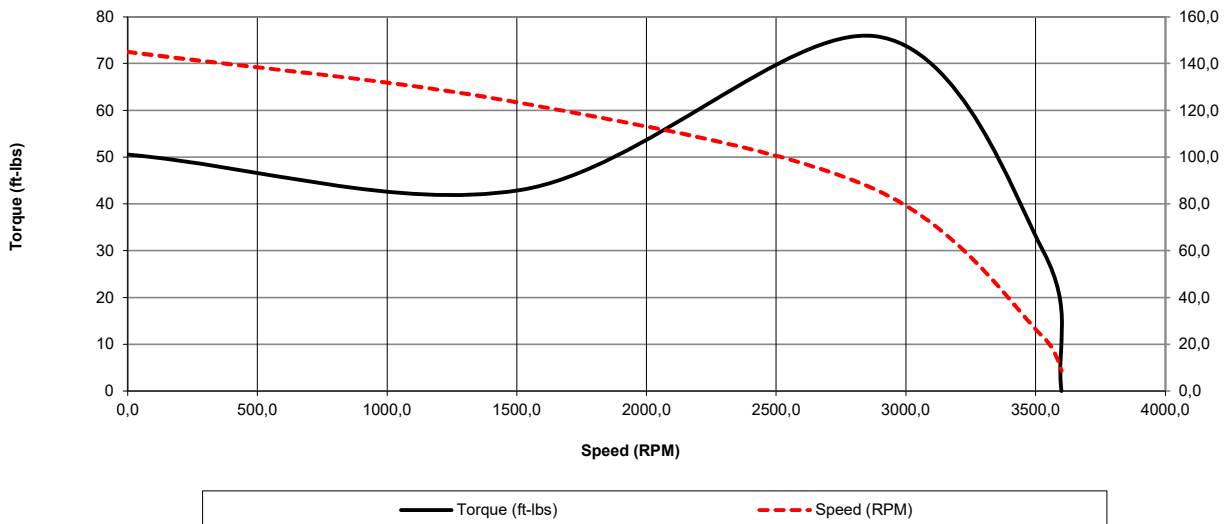


Date: 2024-01-29
 Customer: _____
 Contact: _____
 Submittee: J.C. Lavallée

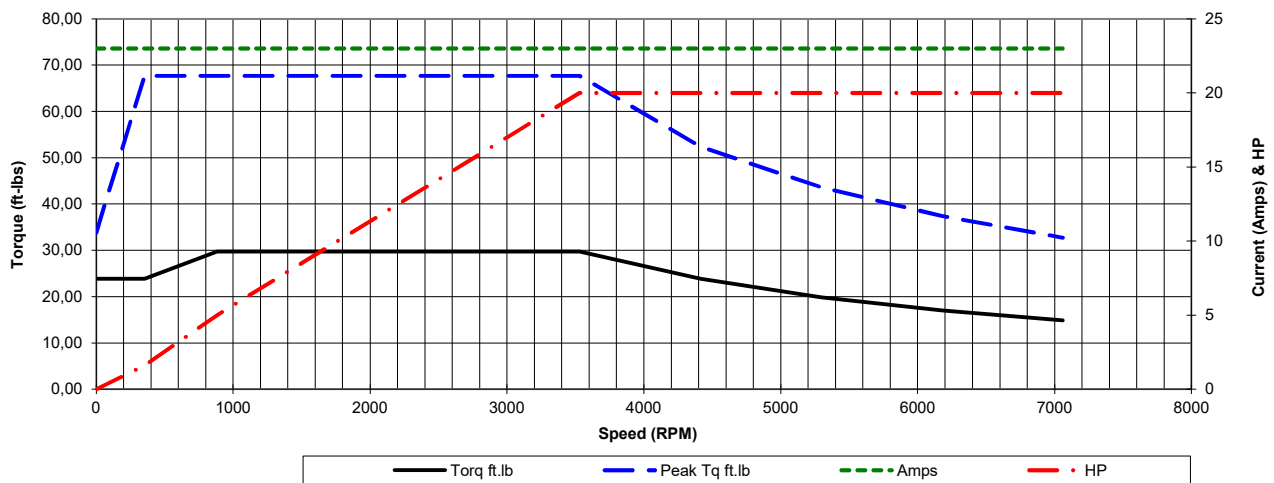
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| NEMA PREMIUM NR CAN NEMA 12 - 12 | | | | | | | | | | |
|----------------------------------|--------------|---------|-----------|------------|-----------|---|--------|----------------|------------------|---------------|
| HP | VAC | RPM | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
| 20 | 460 | 3530 | TEFC | 256TC | 60 | B | 2 | G | F | 50 |
| | 0Hz | 6Hz | 15Hz | 30Hz | 45Hz | 60Hz | 75Hz | 90Hz | 105Hz | 120Hz |
| Amps | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 | 23 |
| RPM | 0 | 353 | 882,5 | 1765 | 2647,5 | 3530 | 4412,5 | 5295 | 6177,5 | 7060 |
| Torq ft.lb | 23,81 | 23,81 | 29,76 | 29,76 | 29,76 | 29,76 | 23,81 | 19,84 | 17,00 | 14,88 |
| Peak Tq ft.lb | 33,85 | 67,70 | 67,70 | 67,70 | 67,70 | 67,70 | 52,37 | 43,64 | 37,41 | 32,73 |
| HP | 0 | 1,6 | 5,0 | 10,0 | 15,0 | 20,0 | 20,0 | 20,0 | 20,0 | 20,0 |
| | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty | S. F. | Ambient | Elevation | dBA @ 1M |
| Speed (RPM) | 0,0 | 1512 | 2880 | 3530 | 3600 | Continuous | 1,15 | 40°C | 3,300 ft | 80 |
| Current (Amps) | 145,0 | 123,3 | 86,3 | 23,0 | 8,7 | VFD Rating: Meets MG1 parts 31.4.4.2 | | | | |
| Torque (ft-lbs) | 50,6 | 43,0 | 75,9 | 29,8 | 0,0 | CT | 10:1 | VT | 20:1 | |

Motor Speed Data



Motor Torque Capability vs RPM



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|----------------------------------|--------------|---------|-----------|------------|-----------|--------------------------------------|-------|----------------|------------------|---------------|
| HP | VAC | RPM | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
| 20 | 460 | 3530 | TEFC | 256TC | 60 | B | 2 | G | F | 50 |
| Load % | 0% | 25% | 50% | 75% | 100% | 125% | 150% | | | |
| Amps | 8,74 | 9,82 | 13,62 | 17,96 | 23,00 | 28,19 | 33,66 | | | |
| Torq ft/lbs | 0 | 7,33 | 14,73 | 22,21 | 29,76 | 37,38 | 45,08 | | | |
| RPM | 0 | 3582,5 | 3565 | 3547,5 | 3530 | 3512,5 | 3495 | | | |
| Eff | 0 | 78,04 | 92,90 | 93,20 | 91,00 | 91,00 | 91,00 | | | |
| PF | 0 | 47,4 | 77,6 | 85 | 89,5 | 91,3 | 91,7 | | | |
| | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty | S. F. | Ambient | Elevation | dBA @ 1M |
| Speed (RPM) | 0 | 1512 | 2880 | 3530 | 3600 | Continuous | 1,15 | 40°C | 3,300 ft | 80 |
| Current (Amps) | 145 | 123,3 | 86,3 | 23 | 8,74 | VFD Rating: Meets MG1 parts 31.4.4.2 | | | | |
| Torque (ft-lbs) | 50,59 | 43,00 | 75,88 | 29,76 | 0,0 | CT | 10:1 | VT | 20:1 | |

