



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

Catalogue #: MQOP-21

| HP | kW | Voltage | S.F. @ 60Hz | EFF. | P.F. | Frame | Design | L.R. Amps |
|----|------|---------|-------------|-------|------|-------|--------|-----------|
| 5 | 3,73 | 230/460 | 1,15 | 86,5% | 0,88 | 182T | B | 46 |

| 60 Hz | | | | | | | | Code | F.L. RPM |
|-------|------|-----|------|-----|-----|-----|--|------|----------|
| 208 | 230 | 416 | 460 | 480 | 575 | 600 | | | |
| / | 12,4 | / | 6,20 | / | / | | | J | 3520 |

| 50 Hz | | | | | | | | |
|-------|-----|-----|-------------|------------|--------------|------|----------|--|
| FLA | | | S.F. @ 50Hz | Efficiency | Power Factor | Code | F.L. RPM | |
| 190 | 380 | 415 | | | | | | |
| 14,0 | 7 | | 1,00 | 86,5% | 0,920 | G | 2900 | |

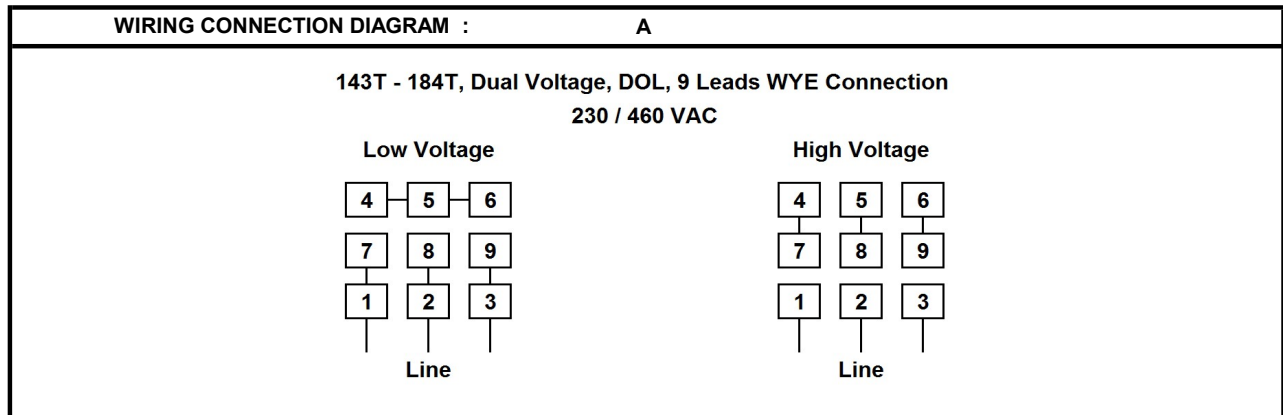
| Wgt. Lbs | PH | Duty | Insul. Class | Amb. | Elevation | Temp. Rise° C |
|----------|----|-------|--------------|------|------------------|---------------|
| 110 | 3 | Cont. | F | 40°C | 1000M (3,300 Ft) | 42 |

| % Efficiency | | % Power Factor | | Torque | | Winding Resist. Ω | Safe Cold Start (Secs) |
|--------------|-------|----------------|------|------------------|-----|-------------------|------------------------|
| Full Load: | 86,5% | Full Load: | 0,88 | Full Load Ft/Lbs | 7,5 | | |
| 3/4 Load: | 86,0% | 3/4 Load: | 0,84 | Locked Rotor % | 200 | | |
| 1/2 Load: | 83,7% | 1/2 Load: | 0,74 | Break Down % | 280 | 2 | 20 |

| 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 |
|--------------------------|-----------------------------|----------------|----------------|-----------------|------------------|-----------|-------------|----------------|
| 0,14 | 8,5 | 1045 | Rolled Steel | Cast Iron | Cast Iron | ODP | IP23 | 14 AWG |

| Ball Bearings | | Grease | Mount Type | Orientation | Paint | Sound Pressure @ 3FT | Sound Power |
|---------------|------|-----------------|------------|-------------|---------|----------------------|-------------|
| DE | ODE | | | | | | |
| 6206 | 6206 | Sealed Bearings | Rigid | Horizontal | RAL6022 | 78 | 88 |

| Inverter Duty, Motor meets MG1 parts 31.4.4.2 | VFD SF | Constant Torque Range | Variable Torque Range | Constant HP RPM |
|-----------------------------------------------|--------|-----------------------|-----------------------|-----------------|
| | 1,00 | 10:1 | 20:1 | 5400 |

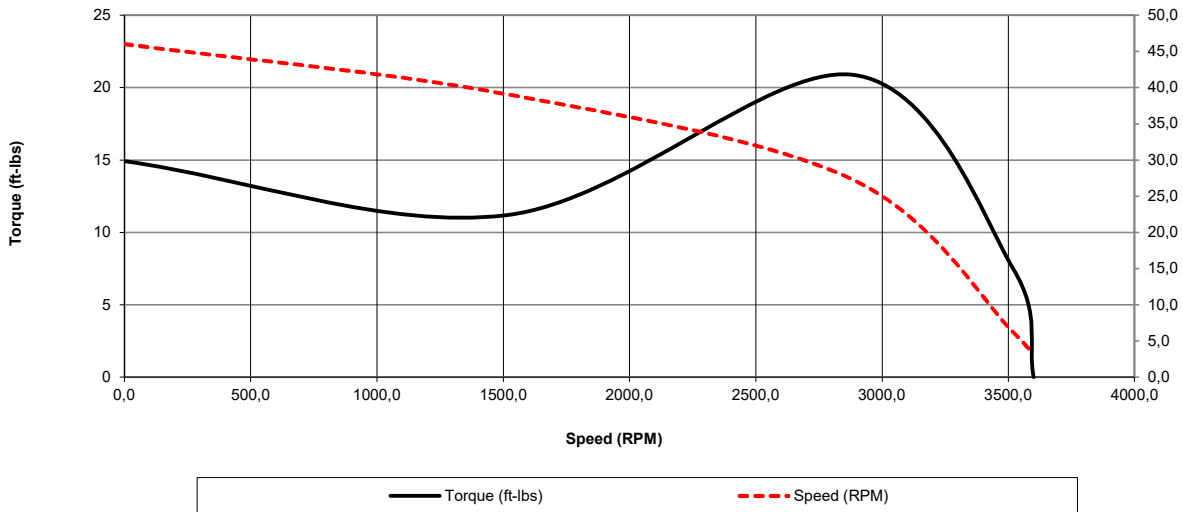


Date: 2023-12-13
 Customer: _____
 Contact: _____
 Submittee: J.C. Lavallée

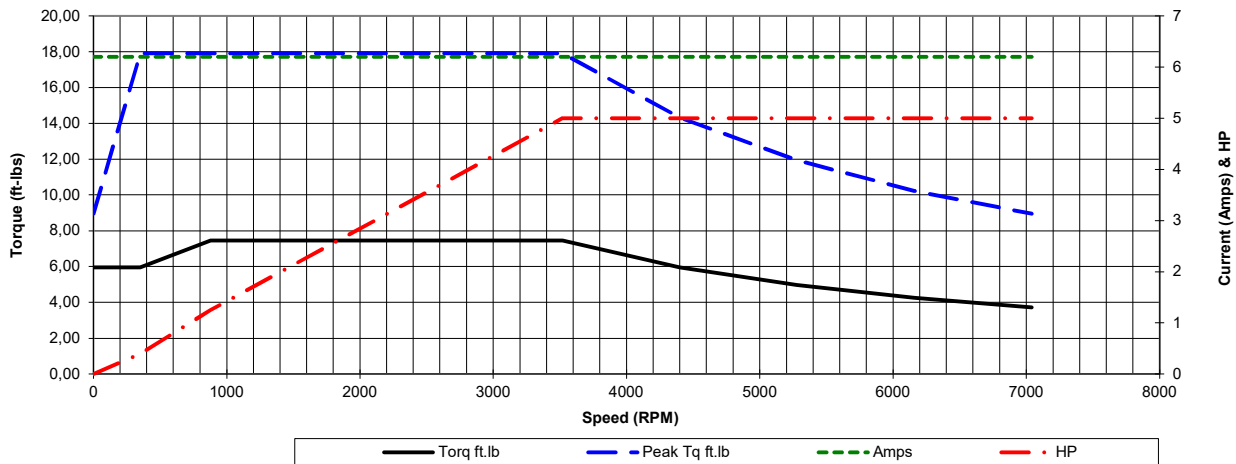
Catalogue #: MQOP-21

| NEMA PREMIUM NR CAN NEMA 12 - 12 | | | | | | | | | | |
|----------------------------------|--------------|---------|-----------|------------|-----------|--------------------------------------|-------|----------------|------------------|---------------|
| HP | VAC | RPM | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
| 5 | 460 | 3520 | ODP | 182T | 60 Hz | B | 2 | J | F | 42 |
| | 0Hz | 6Hz | 15Hz | 30Hz | 45Hz | 60 Hz | 75Hz | 90Hz | 105Hz | 120Hz |
| Amps | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 | 6,2 |
| RPM | 0 | 352 | 880 | 1760 | 2640 | 3520 | 4400 | 5280 | 6160 | 7040 |
| Torq ft.lb | 5,97 | 5,97 | 7,46 | 7,46 | 7,46 | 7,46 | 5,97 | 4,97 | 4,26 | 3,73 |
| Peak Tq ft.lb | 8,95 | 17,90 | 17,90 | 17,90 | 17,90 | 17,90 | 14,32 | 11,94 | 10,23 | 8,95 |
| HP | 0 | 0,4 | 1,3 | 2,5 | 3,8 | 5,0 | 5,0 | 5,0 | 5,0 | 5,0 |
| | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty | S. F. | Ambient | Elevation | dBA @ 1M |
| Speed (RPM) | 0,0 | 1512 | 2880 | 3520 | 3600 | Continuous | 1,15 | 40°C | 3,300 ft | 78 |
| Current (Amps) | 46,0 | 39,1 | 27,4 | 6,2 | 3,2 | VFD Rating: Meets MG1 parts 31.4.4.2 | | | | |
| Torque (ft-lbs) | 14,9 | 11,2 | 20,9 | 7,5 | 0,0 | C.T. | 10:1 | V.T. | 20:1 | VFD SF 1.00 |

Motor Speed Data



Motor Torque Capability vs RPM





Date: 2023-12-13
 Customer: _____
 Contact: _____
 Submittee: J.C. Lavallée

Catalogue #: **MQOP-21**

| NEMA PREMIUM NR CAN NEMA 12 - 12 | | | | | | | | | | |
|----------------------------------|---------------------|----------------|------------------|-------------------|-------------|---------------------------------------------|--------------|----------------|------------------|-----------------|
| HP | VAC | RPM | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
| 5 | 460 | 3520 | ODP | 182T | 60 Hz | B | 2 | J | F | 42 |
| Load % | 0% | 25% | 50% | 75% | 100% | 125% | 150% | | | |
| Amps | 3,16 | 3,63 | 4,15 | 5,08 | 6,20 | 7,44 | 8,75 | | | |
| Torq ft/lbs | 0 | 1,83 | 3,69 | 5,56 | 7,46 | 9,38 | 11,32 | | | |
| RPM | 0 | 3580 | 3560 | 3540 | 3520 | 3500 | 3480 | | | |
| Eff | 0 | 60,04 | 83,70 | 86,00 | 86,50 | 85,14 | 84,81 | | | |
| PF | 0 | 53,7 | 74 | 84 | 88 | 92,4 | 94,6 | | | |
| | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty | S. F. | Ambient | Elevation | dBA @ 1M |
| Speed (RPM) | 0 | 1512 | 2880 | 3520 | 3600 | Continuous | 1,15 | 40°C | 3,300 ft | 78 |
| Current (Amps) | 46 | 39,1 | 27,4 | 6,2 | 3,162 | VFD Rating: Meets MG1 parts 31.4.4.2 | | | | |
| Torque (ft-lbs) | 14,92 | 11,19 | 20,89 | 7,46 | 0,0 | C.T. | 10:1 | V.T. | 20:1 | VFD SF 1.00 |

