



**PERFORMANCE DATA SHEET**

Meets or exceeds MEPS, as described by the US DOE in docket 10CFR431 and NRCAN's Amendment 14

Catalogue #: **MQS-344LFC**

| HP   | kW   | Voltage   | S.F. @ 60Hz | Efficiency | Power Factor | Frame | Design | L.R. Amps |
|------|------|-----------|-------------|------------|--------------|-------|--------|-----------|
| 0,75 | 0,56 | 230 / 460 | 1,15        | 81,1%      | 0,720        | 56C   | B      | 12        |

| 60 Hz |     |     |     |     |     |     |      |          |
|-------|-----|-----|-----|-----|-----|-----|------|----------|
| FLA   |     |     |     |     |     |     | Code | F.L. RPM |
| 208   | 230 | 416 | 460 | 480 | 575 | 600 |      |          |
| /     | 2,4 | /   | 1,2 | /   | /   | /   |      |          |

| 50 Hz |      |     |             |            |              |      |          |      |
|-------|------|-----|-------------|------------|--------------|------|----------|------|
| FLA   |      |     | S.F. @ 50Hz | Efficiency | Power Factor | Code | F.L. RPM |      |
| 190   | 380  | 415 |             |            |              |      |          | 1,00 |
| 2,5   | 1,25 | /   |             |            |              |      |          |      |

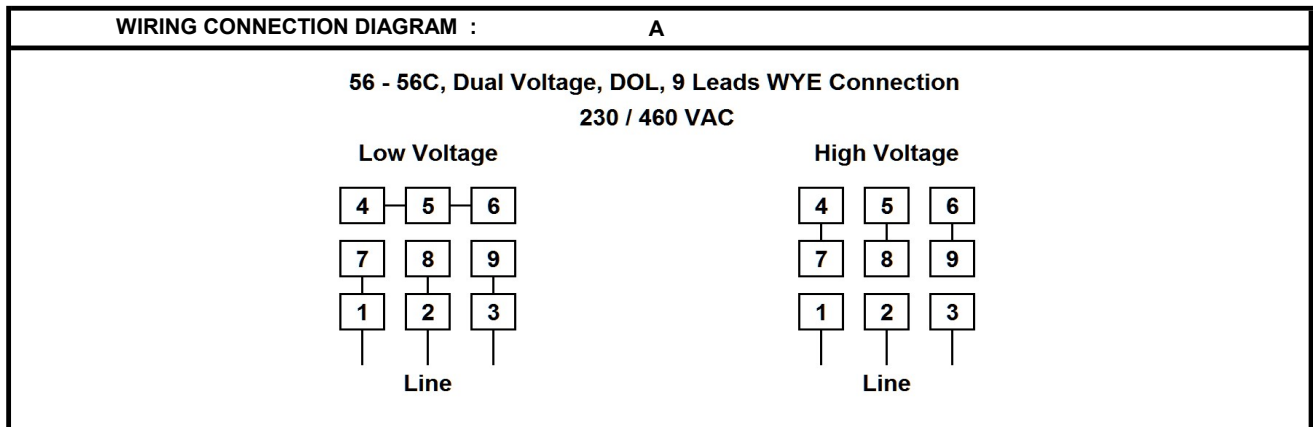
| Wgt. Lbs | PH | Duty  | Insul. Class | Amb. | Elevation       | Temp. Rise° C |
|----------|----|-------|--------------|------|-----------------|---------------|
| 33       | 3  | Cont. | F            | 40°C | 1000M (3300 Ft) | 58            |

| % Efficiency |       | % Power Factor |      | Torque           |     | Winding Resist. Ω | Safe Cold Start (Secs) |
|--------------|-------|----------------|------|------------------|-----|-------------------|------------------------|
| Full Load:   | 81,1% | Full Load:     | 0,72 | Full Load Ft/Lbs | 2,3 |                   |                        |
| 3/4 Load:    | 78,3% | 3/4 Load:      | 0,66 | Locked Rotor %   | 240 |                   |                        |
| 1/2 Load:    | 63,1% | 1/2 Load:      | 0,58 | Break Down %     | 320 |                   |                        |

| 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 |
|--------------------------|-----------------------------|----------------|-----------------|-----------------|------------------|-----------|-------------|----------------|
| /                        | /                           | 304SS          | Stainless Steel |                 |                  | TEFC      | IP69K       | 16AWG          |

| Ball Bearings |      | Grease          | Mount Type | Orientation | Paint | Sound Pressure @ 3FT | Sound Power |
|---------------|------|-----------------|------------|-------------|-------|----------------------|-------------|
| DE            | ODE  |                 |            |             |       |                      |             |
| 6205          | 6205 | Sealed Bearings | Foot       | Horizontal  | -     | /                    | /           |

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



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

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| HP   | VAC | RPM  | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
|------|-----|------|-----------|-------|-----------|--------|-------|----------------|------------------|---------------|
| 0,75 | 460 | 1725 | TEFC      | 56C   | 60        | B      | 4     | K              | F                | 58            |

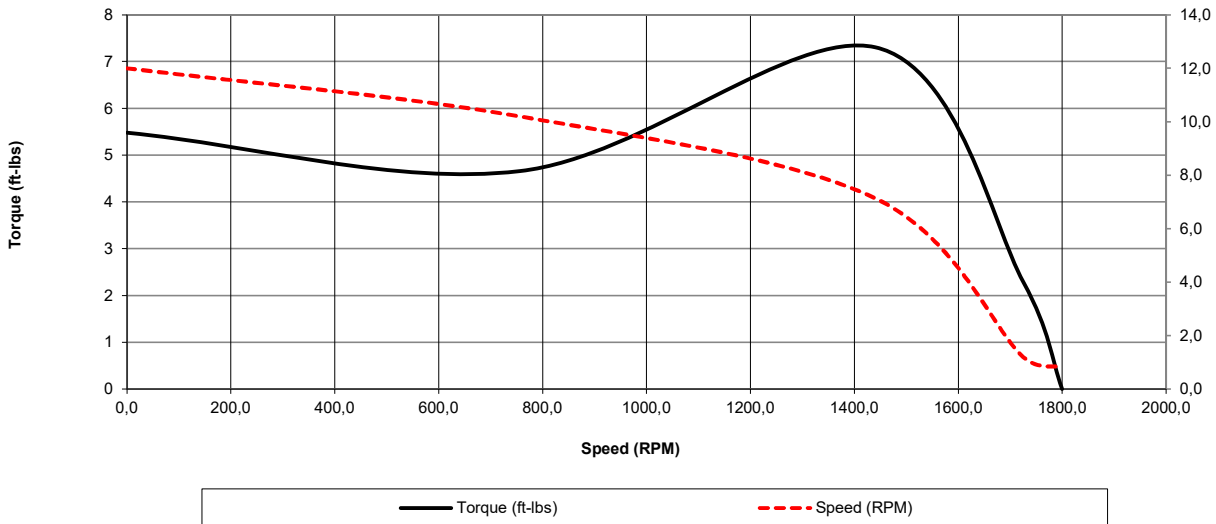
  

|               | 0Hz  | 6Hz   | 15Hz   | 30Hz  | 45Hz    | 60Hz | 75Hz    | 90Hz   | 105Hz   | 120Hz |
|---------------|------|-------|--------|-------|---------|------|---------|--------|---------|-------|
| Amps          | 1,2  | 1,2   | 1,2    | 1,2   | 1,2     | 1,2  | 1,2     | 1,2    | 1,2     | 1,2   |
| RPM           | 0    | 172,5 | 431,25 | 862,5 | 1293,75 | 1725 | 2156,25 | 2587,5 | 3018,75 | 3450  |
| Torq ft.lb    | 1,83 | 1,83  | 2,28   | 2,28  | 2,28    | 2,28 | 1,83    | 1,52   | 1,30    | 1,14  |
| Peak Tq ft.lb | 2,97 | 5,94  | 5,94   | 5,94  | 5,94    | 5,94 | 4,75    | 3,96   | 3,39    | 2,97  |
| HP            | 0    | 0,1   | 0,2    | 0,4   | 0,6     | 0,8  | 0,8     | 0,8    | 0,8     | 0,8   |

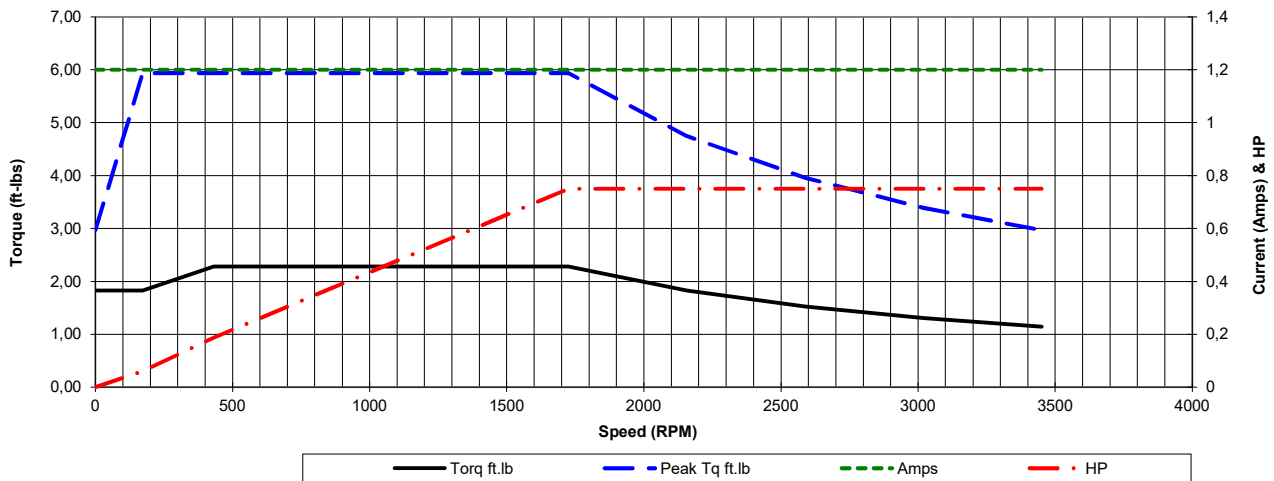
  

|                 | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty  | S. F. | Ambient | Elevation | dBa @ 1M |
|-----------------|--------------|---------|-----------|------------|------|---|-------|---------|-----------|----------|
| Speed (RPM)     | 0,0          | 756     | 1440      | 1725       | 1800 | Continuous                                  | 1,15  | 40°C    | 3,300 ft  | /        |
| Current (Amps)  | 12,0         | 10,2    | 7,1       | 1,2        | 0,8  | <b>VFD Rating: Meets MG1 parts 31.4.4.2</b> |       |         |           |          |
| Torque (ft-lbs) | 5,5          | 4,7     | 7,3       | 2,3        | 0,0  | CT :  | 10:1  | VT :    | 20:1      |          |

Motor Speed Data



Motor Torque Capability vs RPM



Date: 2024-01-29  
 Customer: \_\_\_\_\_  
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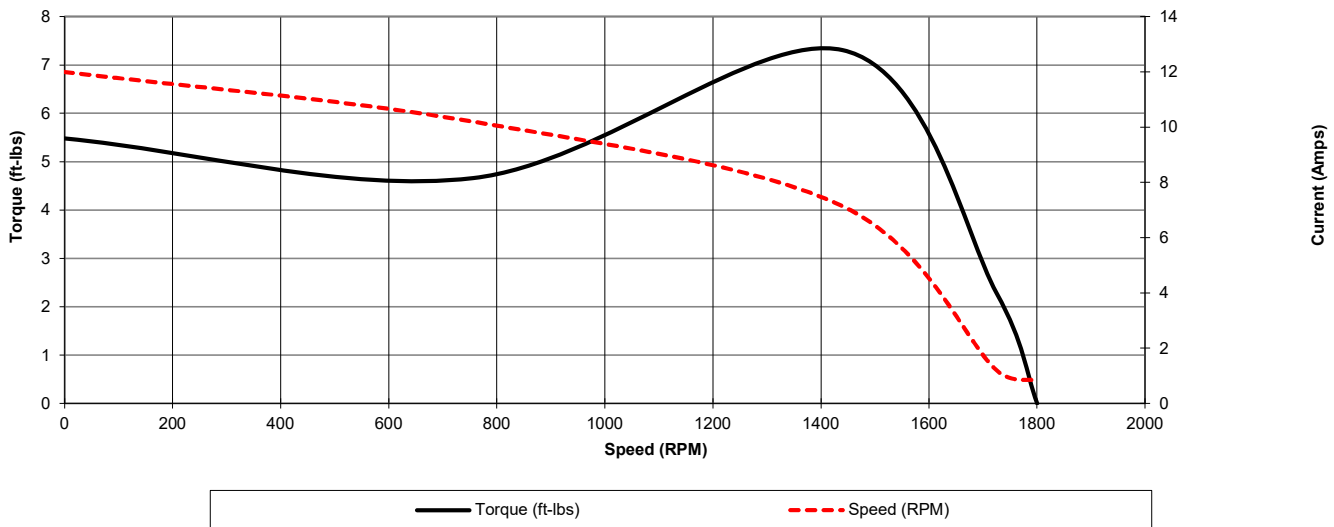
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| HP   | VAC | RPM  | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
|------|-----|------|-----------|-------|-----------|--------|-------|----------------|------------------|---------------|
| 0,75 | 460 | 1725 | TEFC      | 56C   | 60        | B      | 4     | K              | F                | 58            |

| Load %      | 0%   | 25%     | 50%    | 75%     | 100%  | 125%    | 150%   |
|-------------|------|---------|--------|---------|-------|---------|--------|
| Amps        | 0,84 | 0,91    | 0,97   | 1,06    | 1,20  | 1,50    | 1,80   |
| Torq ft/lbs | 0    | 0,55    | 1,12   | 1,69    | 2,28  | 2,89    | 3,50   |
| RPM         | 0    | 1781,25 | 1762,5 | 1743,75 | 1725  | 1706,25 | 1687,5 |
| Eff         | 0    | 45,83   | 62,64  | 75,57   | 81,10 | 79,69   | 77,41  |
| PF          | 0    | 42,0    | 57,6   | 66      | 72,0  | 73,4    | 75,6   |

|                 | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty  | S. F. | Ambient | Elevation | dBA @ 1M |
|-----------------|--------------|---------|-----------|------------|------|---|-------|---------|-----------|----------|
| Speed (RPM)     | 0            | 756     | 1440      | 1725       | 1800 | Continuous                                  | 1,15  | 40°C    | 3,300 ft  | /        |
| Current (Amps)  | 12           | 10,2    | 7,1       | 1,2        | 0,84 | <b>VFD Rating: Meets MG1 parts 31.4.4.2</b> |       |         |           |          |
| Torque (ft-lbs) | 5,48         | 4,66    | 7,31      | 2,28       | 0,0  | CT  | 10:1  | VT      | 20:1      |          |

**Motor Speed Data**



**Motor Load Data**

