

MaxMotion

PERFORMANCE DATA SHEET

Meets or exceeds MEPS (Minimum Efficiency Performance Standards), as described by the US Department of Energy in docket 10CFR431 and Natural Resources Canada's Amendment 14

Catalogue #: **MQRP-202CH**

| HP | kW | Voltage | S.F. @ 60Hz | Efficiency | Power Factor | Frame | Design | L.R. Amps |
|----|------|-----------|-------------|------------|--------------|-------|--------|-----------|
| 2 | 1,49 | 230 / 460 | 1,15 | 85,5% | 0,870 | 56HC | B | 25 |

| 60 Hz | | | | | | | | |
|-------|------|-----|------|-----|-----|-----|------|----------|
| FLA | | | | | | | Code | F.L. RPM |
| 208 | 230 | 416 | 460 | 480 | 575 | 600 | | |
| / | 5,05 | / | 2,53 | / | / | / | L | 3500 |

| 50 Hz | | | | | | | | |
|-------|-------|-----|-----|-------------|------------|--------------|------|----------|
| HP | kW | FLA | | S.F. @ 50Hz | Efficiency | Power Factor | Code | F.L. RPM |
| | | 190 | 380 | | | | | |
| 1,5 | 1,119 | 5,0 | 2,5 | 1,15 | 84,0% | 0,81 | L | 2870 |

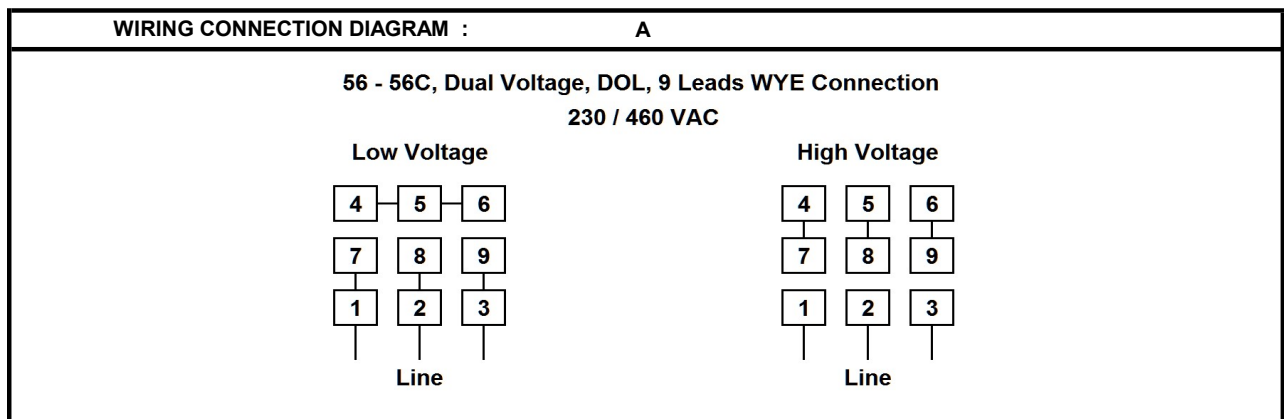
| Wgt. Lbs | PH | Duty | Insul. Class | Amb. | Elevation | Temp. Rise° C |
|----------|----|-------|--------------|------|-----------------|---------------|
| 32 | 3 | Cont. | F | 40°C | 1000M (3300 Ft) | 56 |

| % Efficiency | | % Power Factor | | Torque | | Winding Resist. Ω | Safe Cold Start (Secs) |
|--------------|-------|----------------|------|------------------|-----|-------------------|------------------------|
| Full Load: | 85,5% | Full Load: | 0,87 | Full Load Ft/Lbs | 3,0 | | |
| 3/4 Load: | 86,2% | 3/4 Load: | 0,82 | Locked Rotor % | 388 | | |
| 1/2 Load: | 84,0% | 1/2 Load: | 0,74 | Break Down % | 419 | 1,59 / 6,25 | 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 |
|--------------------------|-----------------------------|----------------|----------------|-----------------|------------------|-----------|-------------|----------------|
| / | / | Steel | Rolled Steel | Aluminium Alloy | | TEFC | IP55 | 14AWG |

| Ball Bearings | | Grease | Mount Type | Orientation | Paint | Sound Pressure @ 3FT | Sound Power |
|---------------|------|-----------------|------------|-------------|-------|----------------------|-------------|
| DE | ODE | | | | | | |
| 6205 | 6203 | Sealed Bearings | Rigid | Horizontal | Black | 58 | / |

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



Date: 2024-05-01
 Customer: _____
 Contact: _____
 Submittee: J.C. Lavallée

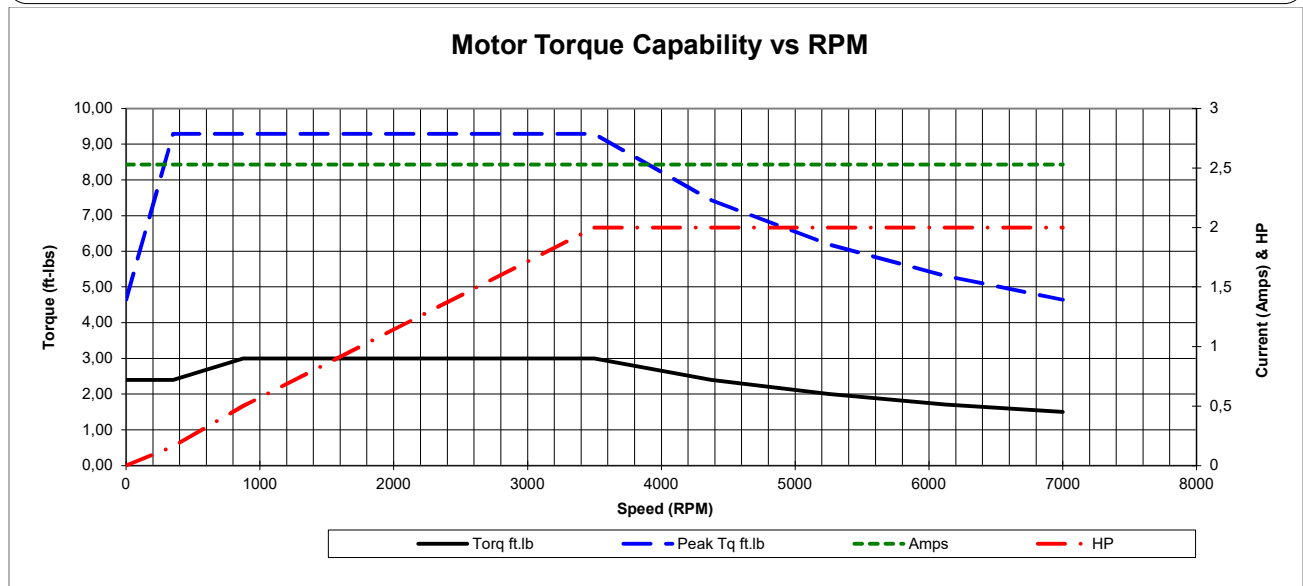
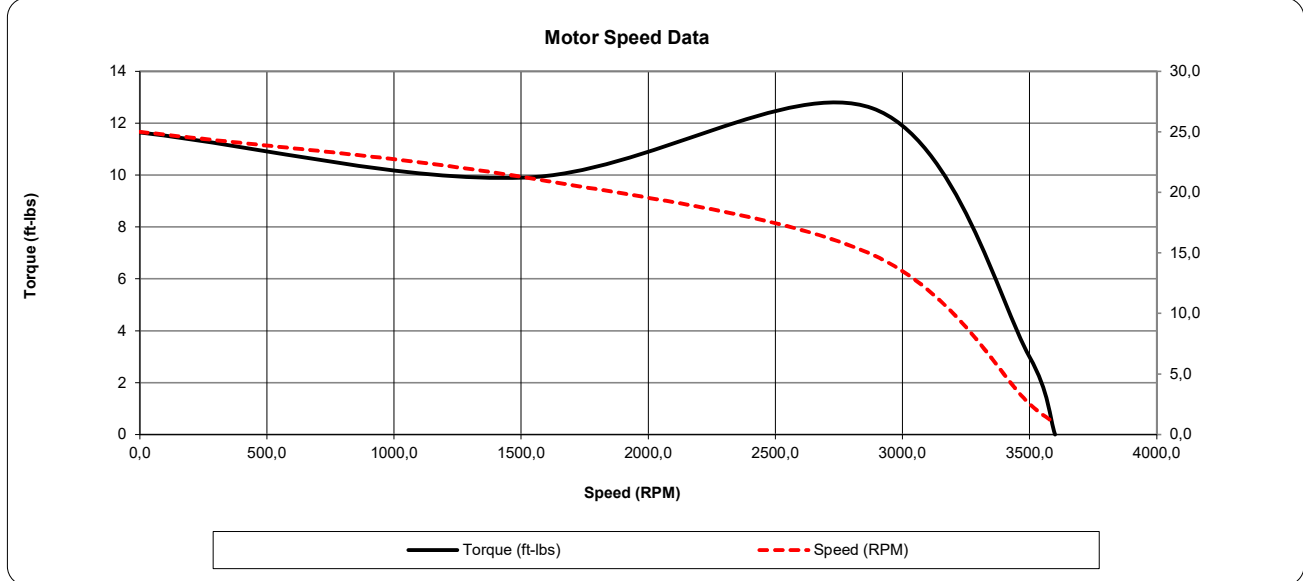
Catalogue #: **MQRP-202CH**

Meets or exceeds MEPS (Minimum Efficiency Performance Standards), as described by the US Department of Energy in docket 10CFR431 and Natural Resources Canada's Amendment 14

| HP | VAC | RPM | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
|----|-----|------|-----------|-------|-----------|--------|-------|----------------|------------------|---------------|
| 2 | 460 | 3500 | TEFC | 56HC | 60 | B | 2 | L | F | 56 |

| | 0Hz | 6Hz | 15Hz | 30Hz | 45Hz | 60Hz | 75Hz | 90Hz | 105Hz | 120Hz |
|---------------|------|------|------|------|------|------|------|------|-------|-------|
| Amps | 2,53 | 2,53 | 2,53 | 2,53 | 2,53 | 2,53 | 2,53 | 2,53 | 2,53 | 2,53 |
| RPM | 0 | 350 | 875 | 1750 | 2625 | 3500 | 4375 | 5250 | 6125 | 7000 |
| Torq ft.lb | 2,40 | 2,40 | 3,00 | 3,00 | 3,00 | 3,00 | 2,40 | 2,00 | 1,71 | 1,50 |
| Peak Tq ft.lb | 4,64 | 9,29 | 9,29 | 9,29 | 9,29 | 9,29 | 7,43 | 6,19 | 5,31 | 4,64 |
| HP | 0 | 0,2 | 0,5 | 1,0 | 1,5 | 2,0 | 2,0 | 2,0 | 2,0 | 2,0 |

| | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty | S. F. | Ambient | Elevation | dBA @ 1M |
|-----------------|--------------|---------|-----------|------------|------|---|-------|---------|-----------|----------|
| Speed (RPM) | 0,0 | 1512 | 2880 | 3500 | 3600 | Continuous | 1,15 | 40°C | 3,300 ft | 58 |
| Current (Amps) | 25,0 | 21,3 | 14,9 | 2,5 | 1,0 | VFD Rating: Meets MG1 parts 31.4.4.2 | | | | |
| Torque (ft-lbs) | 11,6 | 9,9 | 12,6 | 3,0 | 0,0 | C.T. | 10:1 | V.T. | 20:1 | |





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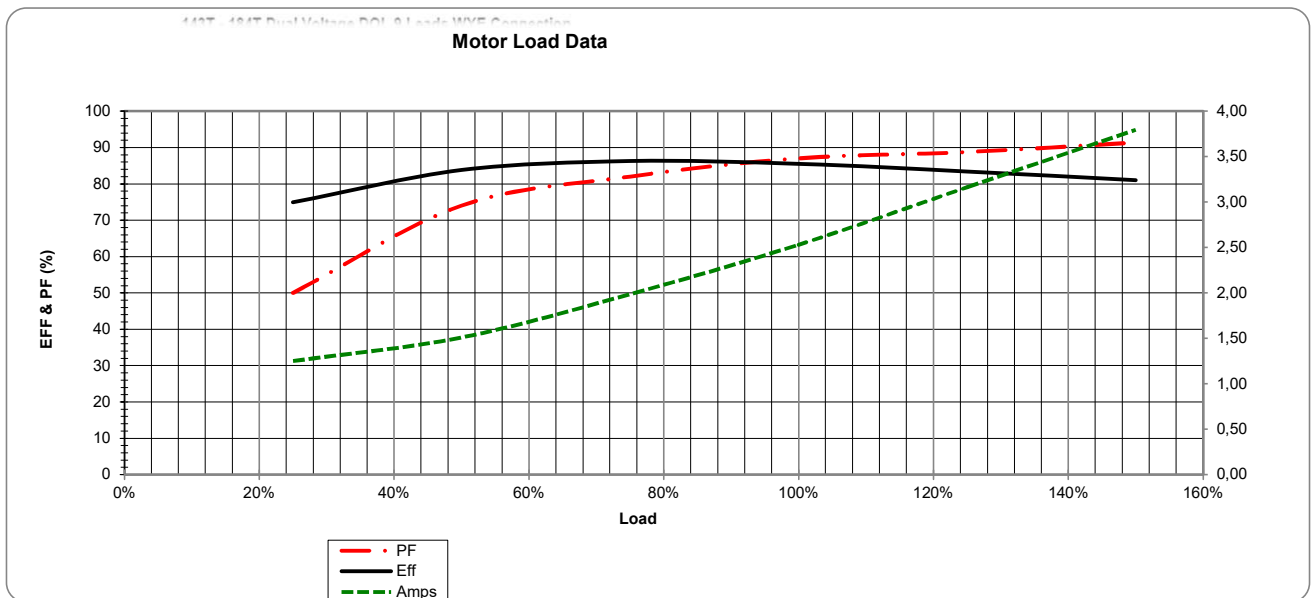
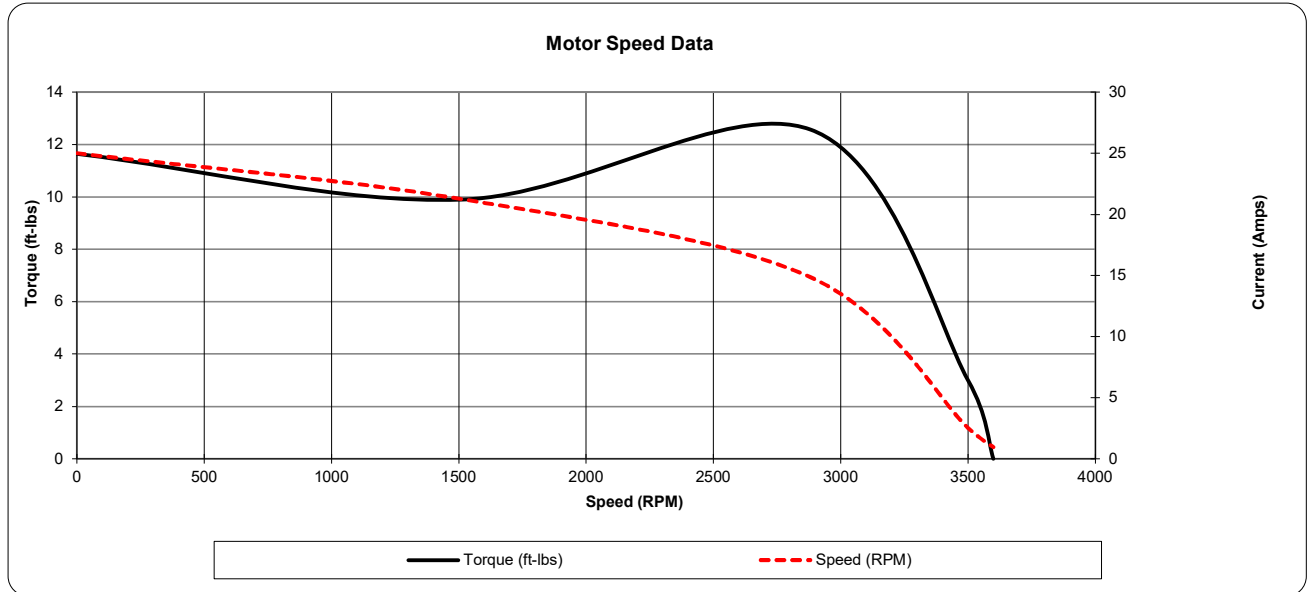
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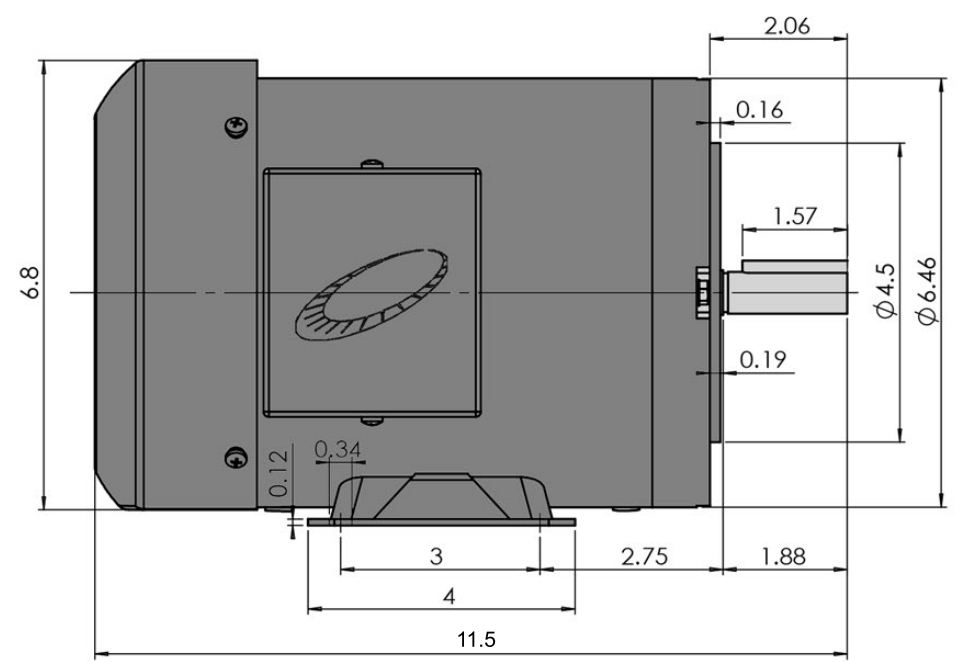
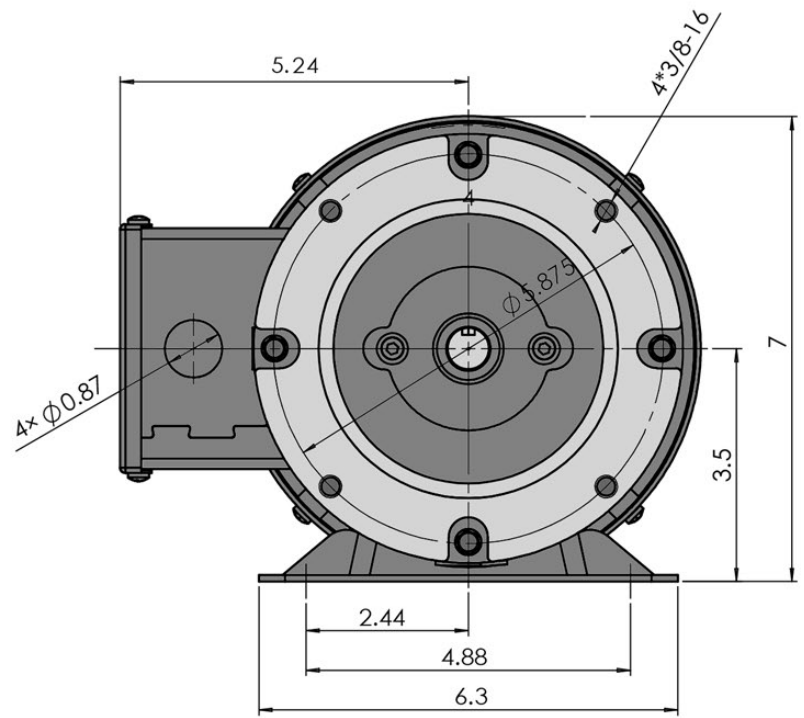
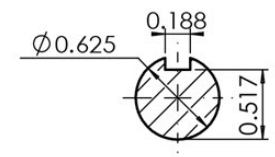
Meets or exceeds MEPS (Minimum Efficiency Performance Standards), as described by the US Department of Energy in docket 10CFR431 and Natural Resources Canada's Amendment 14

| HP | VAC | RPM | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
|----|-----|------|-----------|-------|-----------|--------|-------|----------------|------------------|---------------|
| 2 | 460 | 3500 | TEFC | 56HC | 60 | B | 2 | L | F | 56 |

| Load % | 0% | 25% | 50% | 75% | 100% | 125% | 150% |
|-------------|------|-------|-------|-------|-------|-------|-------|
| Amps | 0,95 | 1,25 | 1,51 | 1,99 | 2,53 | 3,16 | 3,80 |
| Torq ft/lbs | 0 | 0,73 | 1,48 | 2,23 | 3,00 | 3,78 | 4,57 |
| RPM | 0 | 3575 | 3550 | 3525 | 3500 | 3475 | 3450 |
| Eff | 0 | 74,91 | 83,80 | 86,24 | 85,50 | 83,41 | 81,03 |
| PF | 0 | 50,0 | 74 | 82 | 87,0 | 88,7 | 91,4 |

| | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle | Duty | S. F. | Ambient | Elevation | dBA @ 1M |
|-----------------|--------------|---------|-----------|------------|-------|---|-------|---------|-----------|----------|
| Speed (RPM) | 0 | 1512 | 2880 | 3500 | 3600 | Continuous | 1,15 | 40°C | 3,300 ft | 58 |
| Current (Amps) | 25 | 21,3 | 14,9 | 2,53 | 0,954 | VFD Rating: Meets MG1 parts 31.4.4.2 | | | | |
| Torque (ft-lbs) | 11,64 | 9,90 | 12,57 | 3,00 | 0,0 | C.T. | 10:1 | V.T. | 20:1 | |





| | | | | | |
|---|--------------------|-----------|------------|--------------|------------------|
| Version:2HUA | Revised: July 2020 | HP | RPM | FRAME | ENCLOSURE |
| Customer is responsible in determining that MaxMotion product will fit/perform suitably in the intended application | | 2 | 3600 | 56C | TEFC |

MQRP-202CH

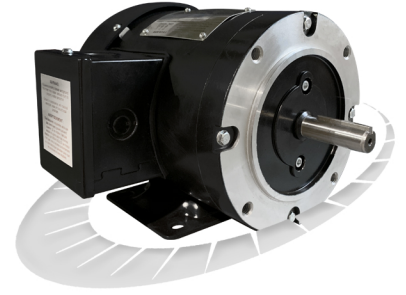
THREE PHASE 56HC AC MOTORS

HEAVY GAUGE ROLLED STEEL CONSTRUCTION
TEFC TOTALLY ENCLOSED FAN COOLED

MaxMotion

Applications:

A versatile design allowing replacement of C-Face or rigid base TEFC motors, for use on gear reducers, pumps, fans, blowers, conveyors, and all agricultural equipment requiring a motor to meet demanding high starting torque applications in severe environmental conditions.



Features:

Design - NEMA Standard MG-1, design B, ambient temperature of 40°C, altitude 1000M, temperature rise B.

Agency Listings and Standard - NEMA MG1, IEEE, IEC, DOE registered, NRCAN, CSAus and CSA Certified, CE and RoHS Compliant

Service Factor - 1.15

Electrical Supply - 3 phase, 230/460VAC, 575VAC @ 60 hz, 3 phase 190/380VAC @ 50 Hz rated to the next lower HP. (± 10% Voltage tolerance)

Windings - Highest quality Corona resistant, Inverter duty copper wire. VPI impregnated with additional dip and bake.

Efficiency - Integral HP models meet or exceed NEMA Premium efficiency levels.

Insulation - Class F insulation, with non-hydroscopic motor leads.

Bearings - Permanently Lubricated High quality Double Shielded Ball Bearings with oversized DE bearings. Lithium based grease operating temperature range – 25° through 175°C.

Enclosure Protection - Totally Enclosed Fan Cooled meeting IEC standard IP55. Factory Certified Division 2 Class I Groups A, B, C, D Class 11 Groups F, G. Meets Temp Code T2B.

Frame Construction - Rolled Steel with cast aluminum end shields.

Conduit Box - With ½ NPT knockouts positioned for wiring access every 90° with rubber gasket between box and motor frame.

Inverter Duty - Constant torque: 10/1 ratio, variable torque: 20/1 ratio

Nameplate - Stainless steel with etched details.

Drain Hole - Positioned in the stator frame at the lowest point, when motors are horizontally mounted.

Fan cover - Plastic fan & heavy duty plastic fan guard

Warranty - 1 year

100% CANADIAN OWNED



THREE PHASE 56HC AC MOTORS

HEAVY GAUGE ROLLED STEEL CONSTRUCTION

TEFC TOTALLY ENCLOSED FAN COOLED



| HP | FL RPM | VOLTS | FRAME | CAT NO. | CONSTRUCTION | NOM EFF. | F.L. AMPS | CODE | WT (Lbs) | DE BRG | ODE BRG | "C" Dimension (Inch) |
|------|--------|-------------|-------|------------|--------------|----------|----------------|------|----------|--------|---------|----------------------|
| 0.33 | 3481 | 208-230/460 | 56C | MQR-132CH | Rolled Steel | 67.6 | 1.28-1.31/0.66 | L | 21 | 6205 | 6203 | 10.7 |
| | 3470 | 575 | 56C | MPR-132CH | Rolled Steel | 62.8 | 0.57 | L | 21 | 6205 | 6203 | 10.7 |
| | 1744 | 208-230/460 | 56C | MQR-134CH | Rolled Steel | 66.1 | 1.53-1.63/0.82 | L | 22 | 6205 | 6203 | 10.7 |
| | 1750 | 575 | 56C | MPR-134CH | Rolled Steel | 69.2 | 0.58 | L | 22 | 6205 | 6203 | 10.7 |
| 0.50 | 3466 | 208-230/460 | 56C | MQR-122CH | Rolled Steel | 71.6 | 1.74-1.67/0.84 | L | 21 | 6205 | 6203 | 10.7 |
| | 3471 | 575 | 56C | MPR-122CH | Rolled Steel | 69.3 | 0.672 | L | 21 | 6205 | 6203 | 10.7 |
| | 1741 | 208-230/460 | 56C | MQR-124CH | Rolled Steel | 74.1 | 1.9-1.95/0.98 | L | 24 | 6205 | 6203 | 10.7 |
| | 1753 | 575 | 56C | MPR-124CH | Rolled Steel | 77.1 | 0.71 | L | 24 | 6203 | 6203 | 10.7 |
| 0.75 | 3469 | 208-230/460 | 56C | MQR-342CH | Rolled Steel | 80.3 | 2.24-2.08/1.04 | L | 22.5 | 6205 | 6203 | 10.7 |
| | 3474 | 575 | 56C | MPR-342CH | Rolled Steel | 76.2 | 0.86 | L | 22.5 | 6205 | 6203 | 10.7 |
| | 1738 | 208-230/460 | 56C | MQR-344CH | Rolled Steel | 80.7 | 2.43-2.34/1.18 | L | 25.3 | 6205 | 6203 | 10.7 |
| | 1744 | 575 | 56C | MPR-344CH | Rolled Steel | 80.5 | 0.91 | L | 25.3 | 6205 | 6203 | 10.7 |
| 1 | 3506 | 208-230/460 | 56C | MQRP-102CH | Rolled Steel | 82.7 | 2.92-2.75/1.38 | L | 25 | 6205 | 6203 | 10.7 |
| | 3510 | 575 | 56C | MPRP-102CH | Rolled Steel | 80.7 | 1.14 | L | 25 | 6205 | 6203 | 10.7 |
| | 1752 | 208-230/460 | 56C | MQRP-104CH | Rolled Steel | 86.5 | 3.01-2.82/1.41 | L | 27 | 6205 | 6203 | 10.7 |
| | 1756 | 575 | 56C | MPRP-104CH | Rolled Steel | 85.6 | 1.14 | L | 27 | 6205 | 6203 | 10.7 |
| 1.5 | 3492 | 208-230/460 | 56C | MQRP-152CH | Rolled Steel | 86.6 | 4.03-3.81/1.9 | L | 28 | 6205 | 6203 | 10.7 |
| | 3478 | 575 | 56C | MPRP-152CH | Rolled Steel | 85.1 | 1.61 | L | 28 | 6205 | 6203 | 10.7 |
| | 1752 | 208-230/460 | 56C | MQRP-154CH | Rolled Steel | 86.6 | 4.59-4.41/2.21 | L | 31 | 6205 | 6203 | 11.5 |
| | 1745 | 575 | 56C | MPRP-154CH | Rolled Steel | 86.7 | 1.65 | L | 31 | 6205 | 6203 | 11.5 |
| 2 | 3500 | 208-230/460 | 56C | MQRP-202CH | Rolled Steel | 85.5 | 5.39-5.05/2.53 | L | 32 | 6205 | 6203 | 11.5 |
| | 3502 | 575 | 56C | MPRP-202CH | Rolled Steel | 86 | 2.03 | L | 32 | 6205 | 6203 | 11.5 |
| | 1741 | 208-230/460 | 56HC | MQRP-204CH | Rolled Steel | 87.1 | 6.0-5.43/2.74 | L | 37 | 6205 | 6203 | 12.5 |
| | 1752 | 575 | 56HC | MPRP-204CH | Rolled Steel | 87.6 | 2.15 | L | 37 | 6205 | 6203 | 12.5 |
| 3 | 3513 | 208-230/460 | 56HC | MQRP-302CH | Rolled Steel | 87.6 | 7.81-7.18/3.54 | L | 42 | 6205 | 6203 | 12.5 |
| | 3512 | 575 | 56HC | MPRP-302CH | Rolled Steel | 87.6 | 3.05 | L | 42 | 6205 | 6203 | 12.5 |

