



## 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 #: MTR-154FDJH

| HP  | kW   | Voltage         | Frequency | EFF.  | P.F.  | Frame | Design | F.L. RPM |
|-----|------|-----------------|-----------|-------|-------|-------|--------|----------|
| 1,5 | 1,12 | 115 / 208 - 230 | 60Hz      | 81,8% | 0,963 | 56JH  | B      | 1750     |

| FLA   |      |      | Service Factor | N.L. Amps @ 115V | N.L. Amps @ 230V | KVA Code | L.R. Amps @ 15v | L.R. Amps @ 230v |
|-------|------|------|----------------|------------------|------------------|----------|-----------------|------------------|
| 115   | 208  | 230  |                | 1,15             | 3,80             |          | 1,9             | J                |
| 12,41 | 6,86 | 6,20 |                |                  |                  |          |                 |                  |

| Start Cap.         | Run Cap.          | Main Winding $\Omega$ 115V @ 25°C | Main Winding $\Omega$ 230V @ 25°C | Auxillary Winding $\Omega$ @ 25°C | Safe Cold Start (Secs) |
|--------------------|-------------------|-----------------------------------|-----------------------------------|-----------------------------------|------------------------|
| 400 $\mu$ f/300vac | 70 $\mu$ f/450vac | 0,3700                            | 1,470                             | 1,390                             | 12                     |

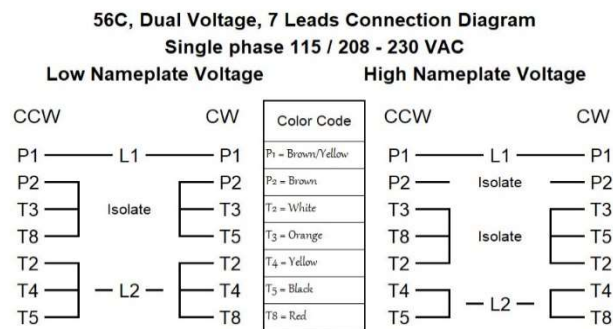
| Wgt. Lbs | PH | Duty  | Insul. Class | Amb. | Elevation        | Temp. Rise° C |
|----------|----|-------|--------------|------|------------------|---------------|
| 44       | 1  | Cont. | F            | 40°C | 1000M (3,300 Ft) | 63            |

| % Efficiency |       | Power Factor |      | Torque           |     | Protection |
|--------------|-------|--------------|------|------------------|-----|------------|
| Full Load:   | 81,8% | Full Load:   | 0,96 | Full Load Ft/Lbs | 4,5 |            |
| 3/4 Load:    | 65,5% | 3/4 Load:    | 0,93 | Locked Rotor %   | 286 |            |
| 1/2 Load:    | 57,7% | 1/2 Load:    | 0,91 | Break Down %     | 261 |            |

| 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          | Rolled Steel   | Aluminium Alloy |                  | TEFC      | IP55        | /              |

| Ball Bearings |      | Grease          | Mount Type | Orientation | Paint | Sound Pressure @ 3FT | Sound Power |
|---------------|------|-----------------|------------|-------------|-------|----------------------|-------------|
| DE            | ODE  |                 |            |             |       |                      |             |
| 6205          | 6203 | Sealed Bearings | Rigid      | Horizontal  | Black | 68                   | /           |

### WIRING CONNECTION DIAGRAM : B



\* Reverse rotation by inverting T5 & T8 connection leads.



Date: 2023-12-22  
 Customer: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Submittee: J.C. Lavallée

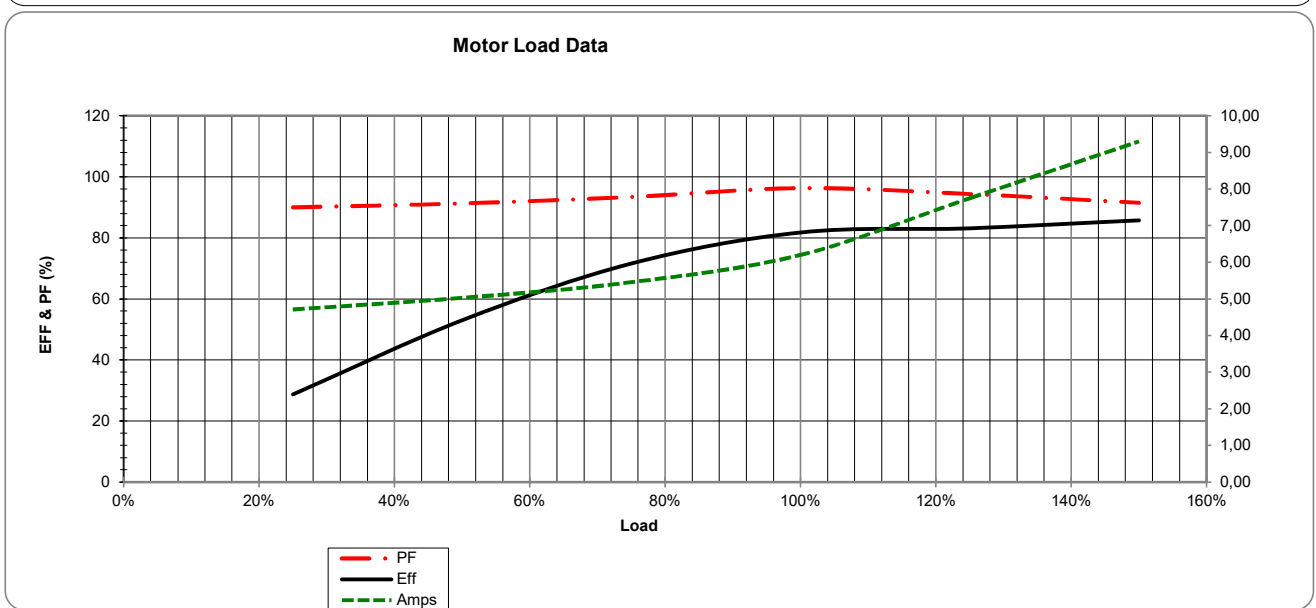
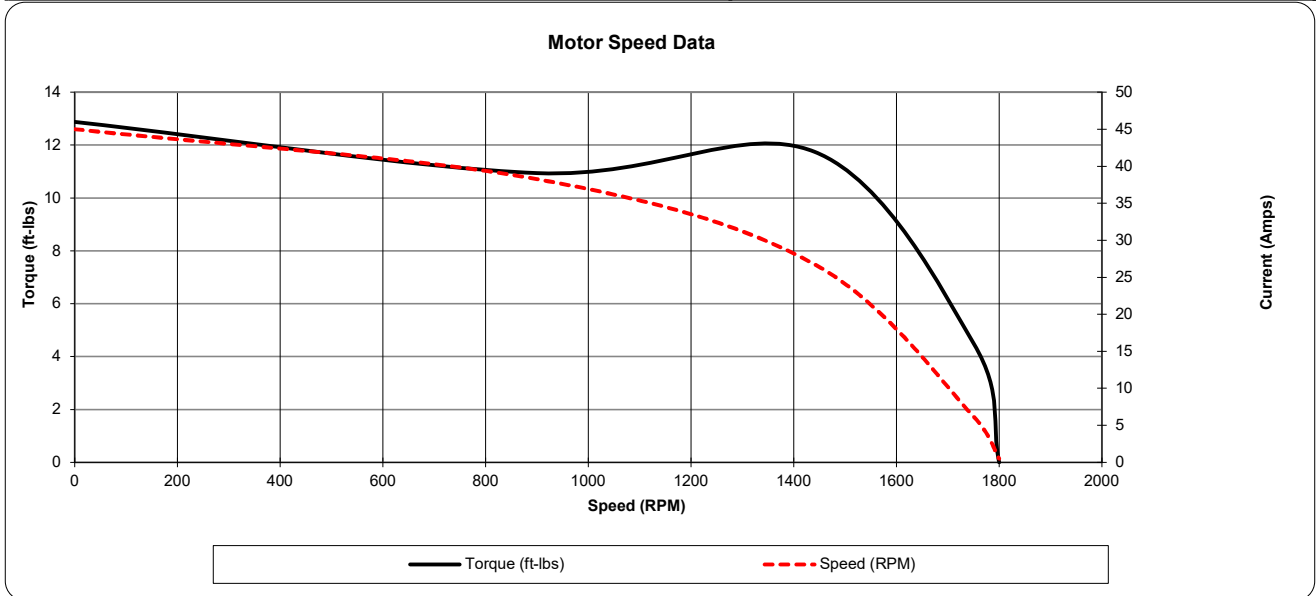
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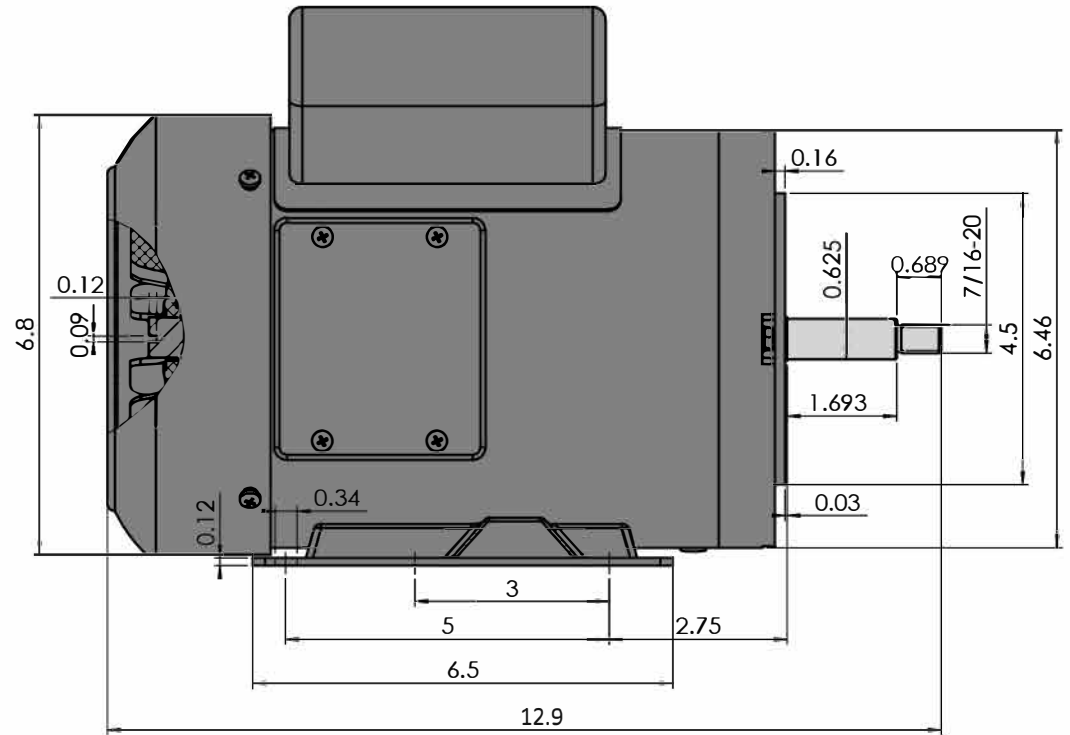
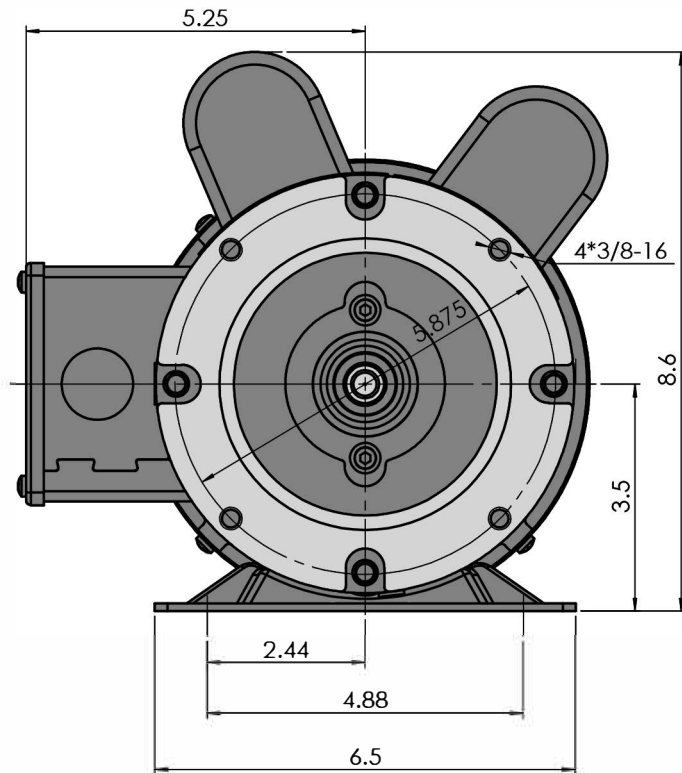
**Meets or exceeds MEPS (Minimum Efficiency Performance Standards), as described by the US Department of Energy in docket 10CFR431 and Natural Resources Canada's Amendment 14**

| HP  | VAC | RPM  | Enclosure | Frame | Frequency | Design | Poles | LR Code Letter | Insulation Class | Temp. Rise °C |
|-----|-----|------|-----------|-------|-----------|--------|-------|----------------|------------------|---------------|
| 1,5 | 230 | 1750 | TEFC      | 56JH  | 60        | B      | 4     | J              | F                | 63            |

|             | 0%   | 25%    | 50%   | 75%    | 100%  | 125%   | 150%  |
|-------------|------|--------|-------|--------|-------|--------|-------|
| Load %      | 0%   | 25%    | 50%   | 75%    | 100%  | 125%   | 150%  |
| Amps        | 0,49 | 4,71   | 5,03  | 5,46   | 6,20  | 7,75   | 9,30  |
| Torq ft/lbs | 0    | 1,10   | 2,22  | 3,35   | 4,50  | 5,67   | 6,85  |
| RPM         | 0    | 1787,5 | 1775  | 1762,5 | 1750  | 1737,5 | 1725  |
| Eff         | 0    | 28,68  | 52,99 | 71,60  | 81,80 | 83,15  | 85,77 |
| PF          | 0,00 | 90,00  | 91,29 | 93,41  | 96,30 | 94,37  | 91,49 |

|                 | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle  | Duty                                 | S. F. | Ambient | Elevation | dBa @ 1M |
|-----------------|--------------|---------|-----------|------------|-------|--------------------------------------|-------|---------|-----------|----------|
| Speed (RPM)     | 0            | 900     | 1440      | 1750       | 1800  | Continuous                           | 1,15  | 40°C    | 3,300 ft  | 68       |
| Current (Amps)  | 45           | 38,3    | 26,8      | 6,2        | 0,494 | VFD Rating: Meets MG1 parts 31.4.4.2 |       |         |           |          |
| Torque (ft-lbs) | 12,87        | 10,94   | 11,75     | 4,50       | 0,0   | C.T.                                 | 1,47  | V.T.    | 1,39      |          |





|   |                        |     |      |       |           |
|---|------------------------|-----|------|-------|-----------|
| Version:1HUA  | Revised: November 2022 | HP  | RPM  | FRAME | ENCLOSURE |
| Customer is responsible in determining that MaxMotion product will fit/perform suitably in the intended application |                        | 1.5 | 1800 | 56J   | TEFC      |

## MTR-154FDJH

# SINGLE PHASE CENTRIFUGAL JET PUMP AC MOTORS

HEAVY GAUGE ROLLED STEEL CONSTRUCTION  
TEFC TOTALLY ENCLOSED FAN COOLED

MaxMotion

## Applications:

A versatile design with removable base for footless mounting, for use on jet pumps, Robust motor design to meet demanding high starting torque applications in severe environmental conditions.

## Features:

**Design** - L, suitable for ambient temperature of 40°C, altitude 1000M

**Agency Listings and Standard** - NEMA, CSAus and CSA Certified, RoHS Compliant

**Service Factor** - 1.15

**Electrical Supply** - 115/230VAC, 60Hz

**Mounting** - Universal mounting by feet or C flange, vertical shaft up or down.

**Frame** - NEMA 56C with threaded shaft for fixed CW rotation

**Shaft** - Made of 304 stainless steel with both DE & ODE oil seals

**Windings** - VPI with additional dip and bake, with numbered and color coded wire leads.

**Insulation** - Class F insulation with B temperature rise.

**Protection** - Automatic thermal overload.

**Voltage and Frequency Variation** -  $\pm 10\%$

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

**Earthing Terminals** - Grounding screw in conduit box

**Enclosure Protection** - IP55

**Frame Construction** - Rolled Steel with cast aluminum end shields

**Conduit Box** - Rotatable 180°, with ½ NPT knockouts positioned for wiring access every 90° with rubber gasket between box and motor frame.

**Nameplate** - Stainless Steel with etched details.

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

**Fan Cover** - Plastic fan & heavy duty plastic fan guard

**Warranty** - 1 year



# SINGLE PHASE CENTRIFUGAL JET PUMP 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 | LRT    | "C" Dimension (Inch) |
|------|--------|---------|-------|-------------|--------------|----------|------------|------|----------|--------|---------|--------|----------------------|
| 0.33 | 3520   | 115/230 | 56J   | MTR-132FDJH | Rolled Steel | 67,3     | 3.83/1.92  | L    | 22       | 6205   | 6203    | 300% + | 11.1                 |
|      | 1770   | 115/230 | 56J   | MTR-134FDJH | Rolled Steel | 68,8     | 3.92/1.96  | M    | 26       | 6205   | 6203    | 300% + | 11.1                 |
| 0.50 | 3520   | 115/230 | 56J   | MTR-122FDJH | Rolled Steel | 71,3     | 5.03/2.52  | L    | 25       | 6205   | 6203    | 300% + | 11.1                 |
|      | 1765   | 115/230 | 56J   | MTR-124FDJH | Rolled Steel | 74,6     | 5.7/2.85   | M    | 27       | 6205   | 6203    | 300% + | 11.1                 |
| 0.75 | 3520   | 115/230 | 56J   | MTR-342FDJH | Rolled Steel | 77,5     | 6.82/3.41  | L    | 26       | 6203   | 6203    | 300% + | 11.1                 |
|      | 1760   | 115/230 | 56J   | MTR-344FDJH | Rolled Steel | 77       | 7.33/3.66  | L    | 31       | 6205   | 6203    | 300% + | 11.9                 |
| 1    | 3520   | 115/230 | 56J   | MTR-102FDJH | Rolled Steel | 77,9     | 8.61/4.31  | J    | 30       | 6205   | 6203    | 300% + | 11.9                 |
|      | 1760   | 115/230 | 56J   | MTR-104FDJH | Rolled Steel | 79,8     | 9.09/4.54  | K    | 38       | 6205   | 6203    | 300% + | 12.9                 |
| 1.5  | 3520   | 115/230 | 56J   | MTR-152FDJH | Rolled Steel | 82,3     | 12.47/6.23 | J    | 36       | 6205   | 6203    | 283%   | 12.9                 |
|      | 1750   | 115/230 | 56J   | MTR-154FDJH | Rolled Steel | 81,8     | 12.41/6.2  | J    | 44       | 6205   | 6203    | 294%   | 12.9                 |
| 2    | 3510   | 115/230 | 56J   | MTR-202FDJH | Rolled Steel | 83       | 15.92/7.96 | H    | 42       | 6205   | 6203    | 273%   | 12.9                 |
|      | 1750   | 115/230 | 56J   | MTR-204FDJH | Rolled Steel | 84,7     | 16.17/8.08 | H    | 50       | 6205   | 6203    | 269%   | 14.1                 |