

# MaxMotion

## IEC PERFORMANCE DATA SHEET IEC Efficiency Level IE3

Catalog #: **IJA160L-2-59**

| HP    | kW    | Voltage   | L.R. Amps | Efficiency | Power Factor | Service Factor | Frame | Design |
|-------|-------|-----------|-----------|------------|--------------|----------------|-------|--------|
| 25,00 | 18,65 | 575 / 990 | 184,68    | 91,7%      | 0,89         | 1,15           | 160L  | N      |

| 60 Hz |     |     |     |       |     |       |       |          |
|-------|-----|-----|-----|-------|-----|-------|-------|----------|
| FLA   |     |     |     |       |     |       | Is/In | F.L. RPM |
| 208   | 230 | 333 | 460 | 575   | 796 | 990   |       |          |
| /     | /   | /   | /   | 22,80 | /   | 13,20 | 8,1   | 3525     |

| 50 Hz |     |     |     |     |     |            |       |          |
|-------|-----|-----|-----|-----|-----|------------|-------|----------|
| FLA   |     |     |     |     |     | Efficiency | Is/In | F.L. RPM |
| 190   | 380 | 400 | 415 | 660 | 725 |            |       |          |
| /     | /   | /   | /   | /   | /   | /          | /     | /        |

| Wgt. Lbs | PH | Duty | Insul. Class | Ambient Temp. | Elevation | Temp. Rise° C |
|----------|----|------|--------------|---------------|-----------|---------------|
| 238,7    | 3  | S1   | H            | 40°C          | 1000 M    | 65            |

| % Efficiency |       | % Power Factor |      | Torque     |      |      | Protector Type | Winding Resist. Ω |
|--------------|-------|----------------|------|------------|------|------|----------------|-------------------|
| Full Load:   | 91,7% | Full Load:     | 0,89 | FLT ft.lbs | 60Hz | 50Hz |                |                   |
| 3/4 Load:    | 91,2% | 3/4 Load:      | 0,82 | LRT %      | 220  | /    | PTC-150°C      | -                 |
| 1/2 Load:    | 90,0% | 1/2 Load:      | 0,70 | BDT %      | 230  | /    |                |                   |

| Rotor Inertia Wk2 Lb-Ft2 | Max Load Inertia Wk2 Lb-Ft2 | Shaft Material | Frame Material | DE Bracket Type | ODE Bracket Type | Mounting | Enclosure | Protection |
|--------------------------|-----------------------------|----------------|----------------|-----------------|------------------|----------|-----------|------------|
| -                        | -                           | Standard       | Aluminum       | Standard        | Standard         | B3       | TEFC      | IP55       |

| Ball Bearings |         | Grease          | Mount Type | Orientation | Cold Start (Secs) | Paint |
|---------------|---------|-----------------|------------|-------------|-------------------|-------|
| DE            | ODE     |                 |            |             |                   |       |
| 6309-C3       | 6309-C3 | Mobil PolyRexEM | Rigid      | Horizontal  | 15                | Red   |

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

**WIRING CONNECTION DIAGRAM : D**

**IEC Frames 112M - 355L, Dual Voltage**  
575 / 990 VAC, 6 posts, 6 leads, Δ / Y Connection

Low Voltage (575Vac)  
6 Leads Δ 6 posts



Line

High Voltage (990Vac)  
6 Leads Y 6 posts

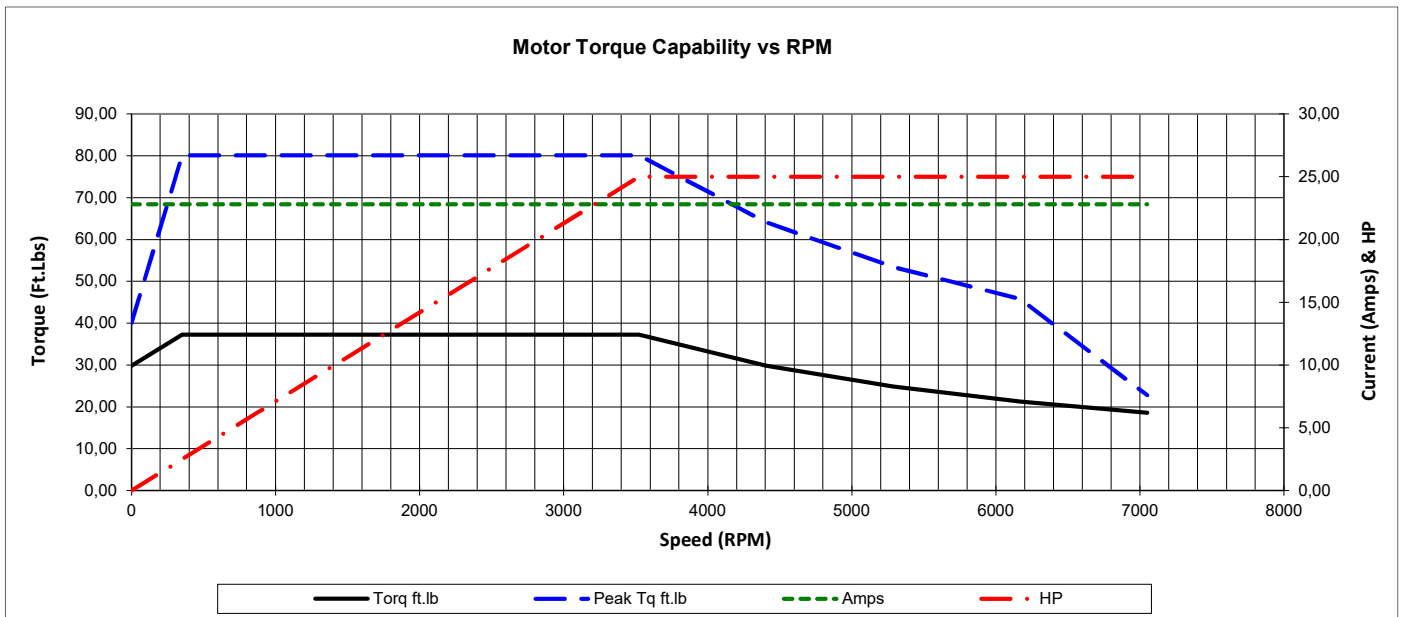
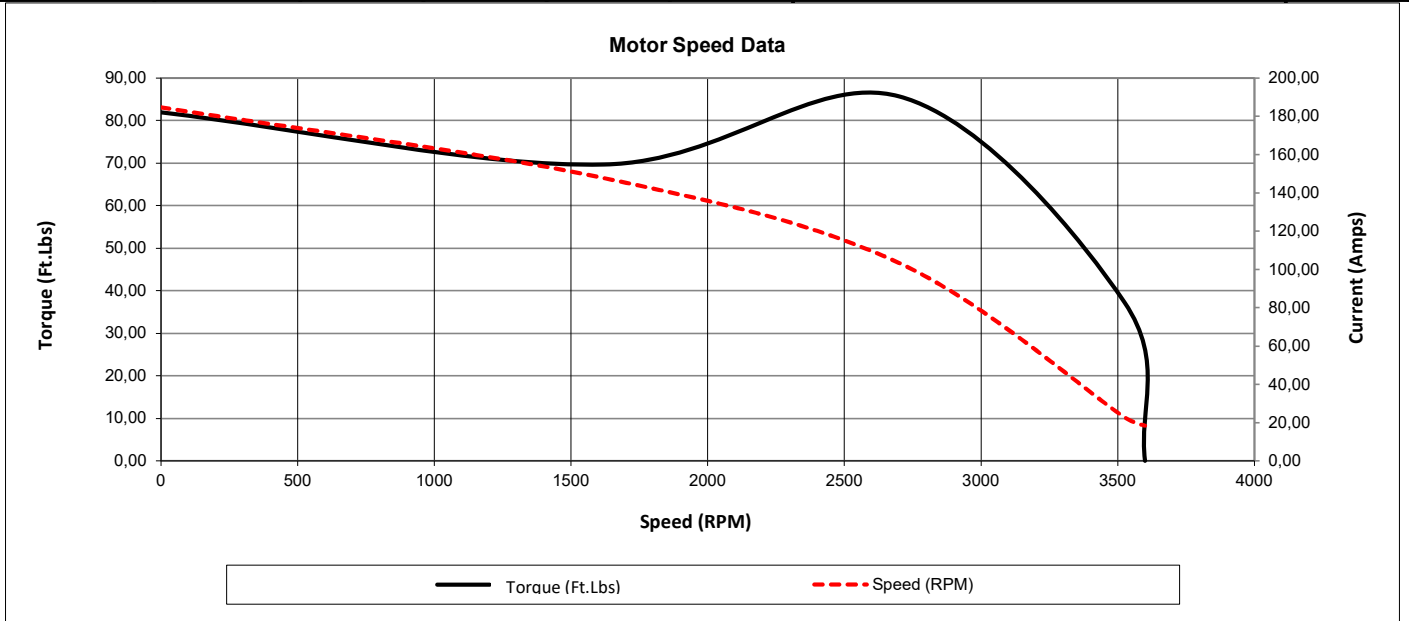


Line

Date: **25 janvier, 2024**  
 Customer: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Submittee: **J.C. Lavallée**

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| IEC Efficiency Level IE3 |              |           |           |            |       |   |        |         |           |                  |               |
|--------------------------|--------------|-----------|-----------|------------|-------|---|--------|---------|-----------|------------------|---------------|
| HP                       | Kw           | VAC       | RPM       | Enclosure  | Frame | Frequency                                   | Design | Poles   | LR Is/In  | Insulation Class | Temp. Rise °C |
| 25,00                    | 18,65        | 575 / 990 | 3525      | TEFC       | 160L  | 60  | N      | 2       | 8,1       | H                | 65            |
|                          |              | 0Hz       | 6Hz       | 15Hz       | 30Hz  | 45Hz  | 60Hz   | 75Hz    | 90Hz      | 105Hz            | 120Hz         |
| Amps                     |              | 22,80     | 22,80     | 22,80      | 22,80 | 22,80                                       | 22,80  | 22,80   | 22,80     | 22,80            | 22,80         |
| RPM                      |              | 0         | 353       | 881        | 1763  | 2644  | 3525   | 4406    | 5288      | 6169             | 7050          |
| Torq ft.lb               |              | 29,80     | 37,25     | 37,25      | 37,25 | 37,25                                       | 37,25  | 29,80   | 24,83     | 21,28            | 18,62         |
| Peak Tq ft.lb            |              | 40,04     | 80,08     | 80,08      | 80,08 | 80,08                                       | 80,08  | 64,07   | 53,39     | 45,76            | 22,80         |
| HP                       |              | 0,00      | 2,50      | 6,25       | 12,50 | 18,75                                       | 25,00  | 25,00   | 25,00     | 25,00            | 25,00         |
|                          | Locked Rotor | Pull-Up   | Breakdown | Rated Load | Idle  | Duty  | S. F.  | Ambient | Elevation | dBA @ 1M         |               |
| Speed (RPM)              | 0            | 1620      | 2700      | 3525       | 3600  | S1  | 1,15   | 40°C    | 3,300 ft  | -                |               |
| Current (Amps)           | 184,68       | 147,74    | 103,42    | 22,80      | 18,42 | <b>VFD Rating: Meets MG1 parts 31.4.4.2</b> |        |         |           |                  |               |
| Torque (ft.lbs)          | 81,95        | 69,65     | 85,67     | 37,25      | 0,0   | CT :  | 10:1   | VT :    | 20:1      |                  |               |



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| HP                       | Kw    | VAC       | RPM  | Enclosure | Frame | Frequency | Design | Poles | LR Is/In | Insulation Class | Temp. Rise °C |
| 25,00                    | 18,65 | 575 / 990 | 3525 | TEFC      | 160L  | 60        | N      | 2     | 8,1      | H                | 65            |

| Load %      | 0%    | 25%   | 50%   | 75%   | 100%  | 125%  | 150%  |
|-------------|-------|-------|-------|-------|-------|-------|-------|
| Amps        | 18,42 | 18,42 | 20,17 | 21,05 | 22,80 | 26,31 | 33,32 |
| Torq ft/lbs | 0     | 9,17  | 18,43 | 27,79 | 37,25 | 48,55 | 62,36 |
| RPM         | 0     | 3581  | 3563  | 3544  | 3525  | 3380  | 3158  |
| Eff %       | 0     | 67,4  | 90,0  | 91,2  | 91,7  | 89,3  | 82,1  |
| PF %        | 0     | 40,7  | 70,3  | 82,3  | 89,0  | 91,7  | 93,5  |

|                 | Locked Rotor | Pull-Up | Breakdown | Rated Load | Idle  | Duty                                 | S. F. | Ambient | Elevation | dBA @ 1M |
|-----------------|--------------|---------|-----------|------------|-------|--------------------------------------|-------|---------|-----------|----------|
| Speed (RPM)     | 0            | 1620    | 2700      | 3525       | 3600  | S1                                   | 1,15  | 40°C    | 3,300 ft  | -        |
| Current (Amps)  | 184,68       | 147,74  | 103,42    | 22,80      | 18,42 | VFD Rating: Meets MG1 parts 31.4.4.2 |       |         |           |          |
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