

THERMAL RATINGS



QUANTS

QUANTS GOLD

ILH

RHB

MSM

THERMAL RATINGS - MSM 38

The Thermal HP Ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | 3450 RPM | | | | | | |
|-------|---------------------|-------------------|-------------------|----------|----------|----------|--------------|---------------------|-------------------|-------------------|----------|----------|----------|--------------|
| | Output Speed RPM | Rated Power HP | Mounting Position | | | | | Output Speed RPM | Rated Power HP | Mounting Position | | | | |
| | | | A1 HP | A2 HP | A3 HP | A4 HP | A5, A6 HP | | | A1 HP | A2 HP | A3 HP | A4 HP | A5, A6 HP |
| 9.80 | 178.6 | 7.45 | 19.7 | 19.7 | 19.7 | 19.5 | 19.8 | 352.2 | 11.19 | 18.9 | 18.4 | 18.8 | 18.3 | 19.4 |
| 11.39 | 153.6 | 6.91 | 18.9 | 18.9 | 18.9 | 18.8 | 19.0 | 302.8 | 10.37 | 18.8 | 18.4 | 18.7 | 18.3 | 19.1 |
| 12.64 | 138.5 | 6.42 | 17.9 | 17.8 | 17.9 | 17.8 | 17.9 | 272.9 | 9.83 | 18.1 | 17.8 | 18.0 | 17.7 | 18.4 |
| 13.76 | 127.1 | 5.89 | 18.1 | 18.1 | 18.2 | 18.1 | 18.2 | 250.6 | 9.39 | 18.6 | 18.4 | 18.6 | 18.3 | 18.9 |
| 15.39 | 113.7 | 5.27 | 17.1 | 17.1 | 17.1 | 17.0 | 17.1 | 224.1 | 8.83 | 17.8 | 17.6 | 17.7 | 17.5 | 18.0 |
| 16.83 | 104.0 | 4.82 | 16.3 | 16.3 | 16.3 | 16.2 | 16.3 | 205.0 | 8.40 | 17.1 | 17.0 | 17.1 | 16.9 | 17.3 |
| 18.47 | 94.7 | 4.39 | 15.6 | 15.6 | 15.6 | 15.5 | 15.6 | 186.8 | 7.96 | 16.5 | 16.5 | 16.5 | 16.4 | 16.7 |
| 20.37 | 85.9 | 3.98 | 15.0 | 15.0 | 15.0 | 14.9 | 15.0 | 169.4 | 7.53 | 16.0 | 16.0 | 16.0 | 15.9 | 16.1 |
| 22.58 | 77.5 | 3.59 | 14.1 | 14.1 | 14.1 | 14.1 | 14.2 | 152.8 | 7.08 | 15.2 | 15.2 | 15.2 | 15.2 | 15.4 |
| 25.58 | 68.4 | 3.17 | 13.7 | 13.7 | 13.7 | 13.7 | 13.7 | 134.9 | 6.25 | 14.9 | 14.9 | 15.0 | 14.9 | 15.0 |
| 28.22 | 62.0 | 2.87 | 12.6 | 12.6 | 12.6 | 12.6 | 12.6 | 122.2 | 5.66 | 13.8 | 13.8 | 13.9 | 13.8 | 13.9 |
| 31.91 | 54.8 | 2.54 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 108.1 | 5.01 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 |
| 36.43 | 48.0 | 2.23 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 94.7 | 4.39 | 12.8 | 12.8 | 12.8 | 12.7 | 12.7 |
| 38.19 | 45.8 | 1.93 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 | 90.3 | 2.91 | 11.3 | 11.3 | 11.3 | 11.2 | 11.2 |
| 43.43 | 40.3 | 1.70 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 79.4 | 2.69 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 |
| 49.56 | 35.3 | 1.49 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 69.6 | 2.47 | 10.4 | 10.4 | 10.4 | 10.4 | 10.4 |
| 55.84 | 31.3 | 1.32 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 61.8 | 2.29 | 9.7 | 9.7 | 9.7 | 9.7 | 9.7 |
| 62.40 | 28.0 | 1.18 | 8.2 | 8.2 | 8.3 | 8.2 | 8.2 | 55.3 | 2.13 | 9.1 | 9.1 | 9.1 | 9.1 | 9.1 |
| 71.18 | 24.6 | 1.04 | 7.6 | 7.6 | 7.6 | 7.6 | 7.6 | 48.5 | 1.79 | 8.4 | 8.4 | 8.4 | 8.4 | 8.4 |
| 80.17 | 21.8 | 0.80 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 43.0 | 1.34 | 7.8 | 7.8 | 7.8 | 7.8 | 7.8 |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 38, 18.47:1, 1750 RPM input speed, 140TC motor frame at 120 degree F ambient, A5 mounting position:

According to the table above, this unit is capable of 15.6 HP Thermally at 68 degree F. To convert this to the capability at 120 degrees F, multiply the rating by the factor in the Thermal Factors table (0.47). Actual Thermal Rating is $15.6 \times 0.47 = 7.332$ HP. The mechanical rating for the MSM 38, 18.47, 140TC frame is 4.36 HP. This unit is not thermally limited.

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THERMAL RATINGS



THERMAL RATINGS - MSM 48

The Thermal HP Ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | | 3450 RPM | | | | | | | |
|-------|--------------|-------------|-------------------|------|------|------|--------|--------------|--------------|-------------|-------------------|------|------|--------|--|--|
| | Output Speed | Rated Power | Mounting Position | | | | | | Output Speed | Rated Power | Mounting Position | | | | | |
| | | | A1A | A2 | A3 | A4 | A5, A6 | A1A | | | A2 | A3 | A4 | A5, A6 | | |
| RPM | HP | HP | HP | HP | HP | HP | HP | RPM | HP | HP | HP | HP | HP | HP | | |
| 7.95 | 220.3 | 7.70 | 30.4 | 30.2 | 30.4 | 30.2 | 30.6 | 434.2 | 11.22 | 29.4 | 27.0 | 28.8 | 28.0 | 30.1 | | |
| 9.55 | 183.3 | 7.07 | 28.5 | 28.3 | 28.5 | 28.3 | 28.6 | 361.4 | 10.30 | 28.8 | 27.1 | 28.2 | 27.8 | 29.2 | | |
| 11.24 | 155.7 | 6.53 | 26.9 | 26.9 | 27.0 | 26.9 | 27.1 | 307.0 | 9.50 | 27.9 | 27.0 | 27.8 | 27.4 | 28.3 | | |
| 12.59 | 139.0 | 6.16 | 26.3 | 26.2 | 26.3 | 26.2 | 26.3 | 274.0 | 8.97 | 27.7 | 27.1 | 27.7 | 27.4 | 28.1 | | |
| 14.11 | 124.0 | 5.80 | 25.2 | 25.1 | 25.2 | 25.1 | 25.2 | 244.4 | 8.44 | 26.9 | 26.4 | 26.8 | 26.6 | 27.1 | | |
| 15.41 | 113.6 | 5.53 | 24.1 | 24.1 | 24.1 | 24.1 | 24.1 | 223.9 | 8.06 | 25.9 | 25.5 | 25.8 | 25.7 | 26.1 | | |
| 16.63 | 105.2 | 6.48 | 22.3 | 22.2 | 22.2 | 22.1 | 22.1 | 207.4 | 9.72 | 21.1 | 20.6 | 20.8 | 20.5 | 20.5 | | |
| 19.34 | 90.5 | 5.98 | 21.2 | 21.1 | 21.1 | 21.1 | 21.1 | 178.4 | 8.97 | 20.4 | 20.1 | 20.3 | 20.1 | 20.0 | | |
| 21.46 | 81.5 | 5.50 | 20.0 | 20.0 | 20.0 | 19.9 | 19.9 | 160.8 | 8.48 | 19.6 | 19.3 | 19.4 | 19.3 | 19.2 | | |
| 23.37 | 74.9 | 5.05 | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 147.6 | 8.08 | 19.9 | 19.7 | 19.8 | 19.6 | 19.5 | | |
| 26.14 | 67.0 | 4.51 | 18.9 | 18.9 | 18.9 | 18.9 | 18.9 | 132.0 | 7.58 | 18.9 | 18.7 | 18.8 | 18.7 | 18.7 | | |
| 28.58 | 61.2 | 4.13 | 18.0 | 18.0 | 18.0 | 18.0 | 18.0 | 120.7 | 7.20 | 18.2 | 18.0 | 18.1 | 18.0 | 17.9 | | |
| 31.36 | 55.8 | 3.76 | 17.3 | 17.3 | 17.3 | 17.3 | 17.3 | 110.0 | 6.82 | 17.5 | 17.4 | 17.5 | 17.4 | 17.4 | | |
| 34.58 | 50.6 | 3.41 | 16.6 | 16.6 | 16.6 | 16.6 | 16.6 | 99.8 | 6.43 | 16.9 | 16.9 | 16.9 | 16.8 | 16.8 | | |
| 38.33 | 45.7 | 3.08 | 15.7 | 15.7 | 15.7 | 15.7 | 15.7 | 90.0 | 6.02 | 16.1 | 16.1 | 16.1 | 16.1 | 16.0 | | |
| 43.43 | 40.3 | 2.72 | 15.2 | 15.2 | 15.2 | 15.2 | 15.2 | 79.4 | 5.36 | 15.7 | 15.7 | 15.7 | 15.7 | 15.6 | | |
| 47.92 | 36.5 | 2.46 | 14.1 | 14.1 | 14.1 | 14.1 | 14.1 | 72.0 | 4.85 | 14.7 | 14.6 | 14.6 | 14.6 | 14.6 | | |
| 54.17 | 32.3 | 2.18 | 13.0 | 13.0 | 13.0 | 13.0 | 13.0 | 63.7 | 4.29 | 13.6 | 13.5 | 13.5 | 13.5 | 13.5 | | |
| 61.86 | 28.3 | 1.91 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 55.8 | 3.76 | 13.5 | 13.5 | 13.5 | 13.5 | 13.4 | | |
| 70.33 | 24.9 | 1.68 | 11.7 | 11.7 | 11.7 | 11.7 | 11.7 | 49.1 | 3.31 | 12.4 | 12.4 | 12.4 | 12.4 | 12.4 | | |
| 75.27 | 23.2 | 1.57 | 11.4 | 11.4 | 11.4 | 11.4 | 11.4 | 45.8 | 2.91 | 12.1 | 12.1 | 12.1 | 12.1 | 12.1 | | |
| 86.77 | 20.2 | 1.36 | 10.3 | 10.3 | 10.3 | 10.3 | 10.3 | 39.8 | 1.87 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | | |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 48, 54.17:1, 3450 RPM input speed, 180TC motor frame at 80 degree F ambient, A4 mounting position:

According to the table above, this unit is capable of 13.5 HP Thermally at 68 degree F. To convert this to the capability at 80 degrees F, multiply the rating by the factor in the Thermal Factors table (0.87). Actual Thermal Rating is $13.5 \times 0.87 = 11.745$ HP. The mechanical rating for the MSM 48, 54.17, 180TC frame is 4.29 HP. This unit is not thermally limited.

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THERMAL RATINGS



THERMAL RATINGS - MSM 68

The Thermal HP ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | | 3450 RPM | | | | | | | |
|-------|---------------------|-------------------|-------------------|----------|----------|----------|--------------|--------------|---------------------|-------------------|-------------------|----------|----------|--------------|--|--|
| | Output Speed RPM | Rated Power HP | Mounting Position | | | | | | Output Speed RPM | Rated Power HP | Mounting Position | | | | | |
| | | | A1 HP | A2 HP | A3 HP | A4 HP | A5, A6 HP | A1 HP | | | A2 HP | A3 HP | A4 HP | A5, A6 HP | | |
| 6.65 | 263.1 | 26.92 | 47.6 | 46.4 | 46.6 | 46.7 | 48.9 | 518.7 | 49.21 | 25.3 | 16.9 | 19.4 | 19.7 | 30.8 | | |
| 8.02 | 218.1 | 25.38 | 47.2 | 46.3 | 46.4 | 46.6 | 47.9 | 430.0 | 45.03 | 32.4 | 25.9 | 27.7 | 28.7 | 35.9 | | |
| 9.63 | 181.7 | 23.74 | 48.8 | 48.4 | 48.4 | 48.5 | 49.5 | 358.3 | 41.10 | 39.2 | 35.8 | 36.3 | 37.2 | 42.0 | | |
| 11.29 | 155.0 | 21.52 | 46.6 | 46.4 | 46.3 | 46.4 | 47.1 | 305.7 | 37.77 | 40.3 | 37.8 | 38.2 | 38.9 | 42.2 | | |
| 13.45 | 130.1 | 18.27 | 43.6 | 43.4 | 43.4 | 43.5 | 43.9 | 256.5 | 34.29 | 39.7 | 38.2 | 38.4 | 39.1 | 41.2 | | |
| 14.59 | 120.0 | 16.85 | 42.9 | 42.8 | 42.7 | 42.8 | 43.2 | 236.5 | 32.35 | 40.1 | 38.9 | 39.0 | 39.5 | 41.2 | | |
| 16.28 | 107.5 | 15.09 | 41.2 | 41.1 | 41.1 | 41.2 | 41.5 | 211.9 | 29.42 | 39.4 | 38.6 | 38.6 | 39.0 | 40.3 | | |
| 17.64 | 99.2 | 13.93 | 39.7 | 39.7 | 39.6 | 39.7 | 39.9 | 195.6 | 27.47 | 38.5 | 37.8 | 37.8 | 38.2 | 39.2 | | |
| 19.99 | 87.5 | 12.29 | 37.6 | 37.5 | 37.5 | 37.5 | 37.7 | 172.6 | 24.24 | 37.1 | 36.6 | 36.6 | 36.9 | 37.6 | | |
| 21.54 | 81.3 | 11.41 | 35.7 | 35.6 | 35.6 | 35.6 | 35.7 | 160.2 | 22.50 | 35.6 | 35.1 | 35.1 | 35.4 | 35.9 | | |
| 23.29 | 75.2 | 10.55 | 34.0 | 34.0 | 34.0 | 34.0 | 34.1 | 148.2 | 20.81 | 34.2 | 33.9 | 33.9 | 34.1 | 34.5 | | |
| 26.75 | 65.4 | 7.81 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 129.0 | 11.92 | 30.4 | 30.0 | 30.3 | 30.1 | 30.0 | | |
| 29.37 | 59.6 | 7.11 | 30.2 | 30.1 | 30.2 | 30.2 | 30.1 | 117.5 | 11.15 | 29.8 | 29.4 | 29.7 | 29.5 | 29.4 | | |
| 32.34 | 54.1 | 6.46 | 28.6 | 28.5 | 28.6 | 28.5 | 28.5 | 106.7 | 10.40 | 28.3 | 28.1 | 28.2 | 28.2 | 28.1 | | |
| 35.10 | 49.9 | 5.95 | 27.4 | 27.4 | 27.4 | 27.4 | 27.4 | 98.3 | 9.80 | 27.4 | 27.2 | 27.4 | 27.3 | 27.3 | | |
| 38.25 | 45.7 | 5.46 | 26.2 | 26.2 | 26.2 | 26.2 | 26.2 | 90.2 | 9.21 | 26.3 | 26.1 | 26.3 | 26.2 | 26.2 | | |
| 41.89 | 41.8 | 4.99 | 24.9 | 24.9 | 24.9 | 24.9 | 24.9 | 82.4 | 8.63 | 25.2 | 25.0 | 25.1 | 25.1 | 25.1 | | |
| 46.14 | 37.9 | 4.53 | 23.6 | 23.6 | 23.6 | 23.6 | 23.6 | 74.8 | 8.05 | 24.0 | 25.5 | 23.9 | 23.9 | 23.8 | | |
| 53.07 | 33.0 | 3.94 | 22.1 | 22.4 | 22.1 | 22.1 | 22.4 | 65.0 | 7.29 | 22.7 | 22.6 | 22.6 | 22.7 | 22.6 | | |
| 57.49 | 30.4 | 3.63 | 20.8 | 20.8 | 20.8 | 20.8 | 20.8 | 60.0 | 6.89 | 21.4 | 21.3 | 21.4 | 21.4 | 21.4 | | |
| 63.54 | 27.5 | 3.29 | 19.6 | 19.6 | 19.6 | 19.6 | 19.6 | 54.3 | 6.41 | 20.3 | 20.1 | 20.2 | 20.3 | 20.2 | | |
| 74.13 | 23.6 | 2.82 | 18.4 | 18.4 | 18.4 | 18.4 | 18.4 | 46.5 | 5.56 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 | | |
| 82.52 | 21.2 | 2.53 | 17.1 | 17.1 | 17.1 | 17.1 | 17.1 | 41.8 | 4.39 | 17.9 | 17.8 | 17.9 | 17.9 | 17.9 | | |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 68, 6.65:1, 3450 RPM input speed, 210TC motor frame at 40 degree F ambient, A2 mounting position:

According to the table above, this unit is capable of 16.9 HP Thermally at 68 degree F. To convert this to the capability at 40 degrees F, multiply the rating by the factor in the Thermal Factors table (1.30). Actual Thermal Rating is 16.9*1.3 = 21.97 HP. The mechanical rating for the MSM 68, 6.65, 210TC frame is 49.21 HP. This unit is now thermally limited to 21.97 HP.

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THERMAL RATINGS



THERMAL RATINGS - MSM 88

The Thermal HP ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | | 3450 RPM | | | | | | | |
|--------|--------------|--------------|-------------------|------|------|------|--------|--------------|--------------|-------------|-------------------|------|------|--------|--|--|
| | Output Speed | Rated Power | Mounting Position | | | | | | Output Speed | Rated Power | Mounting Position | | | | | |
| | | | A1 | A2 | A3 | A4 | A5, A6 | A1 | | | A2 | A3 | A4 | A5, A6 | | |
| | RPM | HP | HP | HP | HP | HP | HP | RPM | HP | HP | HP | HP | HP | HP | | |
| 8.85 | 197.8 | 45.47 | 90.2 | 85.7 | 89.1 | 87.5 | 91.7 | 390.0 | 79.73 | 52.3 | 20.4 | 40.9 | 36.1 | 57.3 | | |
| 10.79 | 162.2 | 43.28 | 88.2 | 86.1 | 88.4 | 87.1 | 89.7 | 319.8 | 71.77 | 64.6 | 49.2 | 64.1 | 58.0 | 72.1 | | |
| 12.64 | 138.4 | 36.94 | 84.4 | 82.9 | 84.5 | 83.6 | 85.4 | 272.9 | 65.75 | 69.1 | 58.3 | 68.5 | 64.9 | 74.4 | | |
| 14.86 | 117.8 | 31.42 | 84.9 | 84.1 | 85.1 | 84.5 | 85.7 | 232.2 | 59.94 | 76.1 | 70.1 | 76.8 | 73.8 | 80.2 | | |
| 17.05 | 102.6 | 27.39 | 80.1 | 79.5 | 80.2 | 79.7 | 80.6 | 202.3 | 53.99 | 75.0 | 70.7 | 75.4 | 73.6 | 77.9 | | |
| 20.12 | 87.0 | 23.20 | 73.8 | 73.5 | 73.9 | 73.6 | 74.2 | 171.4 | 45.74 | 72.1 | 69.2 | 72.3 | 71.1 | 73.9 | | |
| 21.81 | 80.2 | 21.41 | 72.2 | 72.0 | 72.3 | 72.0 | 72.5 | 158.2 | 42.20 | 71.6 | 69.6 | 71.8 | 71.1 | 73.2 | | |
| 24.25 | 72.2 | 19.25 | 68.4 | 68.2 | 68.5 | 68.3 | 68.7 | 142.3 | 37.96 | 69.1 | 67.5 | 69.2 | 68.6 | 70.3 | | |
| 26.34 | 66.4 | 17.73 | 64.8 | 64.7 | 64.8 | 64.7 | 65.0 | 131.0 | 34.94 | 66.2 | 64.9 | 66.2 | 65.8 | 67.0 | | |
| 29.14 | 60.1 | 16.03 | 61.9 | 61.9 | 62.1 | 61.9 | 62.1 | 118.4 | 31.59 | 64.1 | 63.1 | 64.2 | 63.9 | 64.7 | | |
| 30.67 | 57.1 | 13.62 | 56.4 | 56.2 | 56.5 | 56.2 | 56.2 | 112.5 | 24.19 | 63.3 | 54.7 | 55.5 | 55.5 | 55.2 | | |
| 34.23 | 51.1 | 12.20 | 54.1 | 54.0 | 54.2 | 54.0 | 54.0 | 100.8 | 22.24 | 54.3 | 53.3 | 54.0 | 54.0 | 53.8 | | |
| 37.08 | 47.2 | 11.27 | 52.1 | 51.9 | 52.1 | 51.9 | 51.9 | 93.0 | 20.99 | 52.7 | 51.8 | 52.5 | 52.5 | 52.2 | | |
| 42.03 | 41.6 | 9.94 | 49.2 | 49.1 | 49.2 | 49.2 | 49.1 | 82.1 | 19.17 | 50.2 | 49.6 | 50.0 | 50.0 | 49.8 | | |
| 45.27 | 38.7 | 9.23 | 46.8 | 46.8 | 46.8 | 46.8 | 46.8 | 76.2 | 18.18 | 48.1 | 47.6 | 47.9 | 47.9 | 47.8 | | |
| 48.95 | 35.7 | 8.53 | 44.8 | 44.7 | 44.8 | 44.8 | 44.7 | 70.5 | 16.83 | 46.3 | 45.8 | 46.1 | 46.1 | 45.9 | | |
| 53.16 | 32.9 | 7.86 | 42.7 | 42.7 | 42.7 | 42.7 | 42.7 | 64.9 | 15.49 | 44.4 | 43.9 | 44.1 | 44.3 | 44.1 | | |
| 58.78 | 29.8 | 7.11 | 40.1 | 40.1 | 40.1 | 40.1 | 40.1 | 58.7 | 14.01 | 41.9 | 41.5 | 41.8 | 41.8 | 41.8 | | |
| 63.67 | 27.5 | 6.56 | 38.3 | 38.3 | 38.3 | 38.3 | 38.3 | 54.2 | 12.94 | 40.2 | 40.0 | 40.1 | 40.2 | 40.1 | | |
| 71.75 | 24.4 | 5.82 | 36.2 | 36.2 | 36.2 | 36.2 | 36.2 | 48.1 | 11.48 | 38.3 | 38.1 | 38.1 | 38.2 | 38.1 | | |
| 78.56 | 22.3 | 5.32 | 33.7 | 33.6 | 33.6 | 33.6 | 33.6 | 43.9 | 9.98 | 35.7 | 35.5 | 35.6 | 35.7 | 35.7 | | |
| 87.50 | 20.0 | 4.77 | 31.1 | 31.1 | 31.1 | 31.1 | 31.1 | 39.4 | 6.98 | 33.2 | 34.9 | 33.0 | 33.2 | 33.1 | | |
| 100.06 | 17.5 | 3.22 | 29.6 | 29.6 | 29.6 | 29.6 | 29.6 | 34.5 | 4.42 | 31.8 | 31.6 | 31.7 | 31.8 | 33.3 | | |
| 110.96 | 15.8 | 2.94 | 27.5 | 27.4 | 27.5 | 27.5 | 27.5 | 31.1 | 3.03 | 29.6 | 29.5 | 29.5 | 29.6 | 29.5 | | |
| 123.05 | 14.2 | 2.68 | 25.5 | 25.4 | 25.4 | 25.5 | 25.5 | 28.0 | 2.17 | 27.6 | 27.4 | 27.4 | 27.6 | 27.4 | | |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 88, 29.14:1, 1750 RPM input speed, 210TC motor frame at 100 degree F ambient, A3 mounting position:

According to the table above, this unit is capable of 62.1 HP Thermally at 68 degree F. To convert this to the capability at 100 degrees F, multiply the rating by the factor in the Thermal Factors table (0.68). Actual Thermal Rating is 62.1 * 0.68 = 42.228 HP. The mechanical rating for the MSM 88, 29.14, 210TC frame is 16.03 HP. This unit is not thermally limited.

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| NOMENCLATURE PAGE MSM-4 | MOUNTING POSITIONS PAGE MSM-10 | SELECTION GEARMOTOR PAGE MSM-62 | WEIGHTS PAGE MSM-250 |
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THERMAL RATINGS



THERMAL RATINGS - MSM 108

The Thermal HP ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | 3450 RPM | | | | | | |
|-------|--------------|--------------|-------------------|-------|-------|-------|--------|--------------|---------------|-------------------|------|------|------|--------|
| | Output Speed | Rated Power | Mounting Position | | | | | Output Speed | Rated Power | Mounting Position | | | | |
| | | | A1 | A2 | A3 | A4 | A5, A6 | | | A1 | A2 | A3 | A4 | A5, A6 |
| | RPM | HP | HP | HP | HP | HP | HP | RPM | HP | HP | HP | HP | HP | HP |
| 9.52 | 183.8 | 74.16 | 111.9 | 100.8 | 107.9 | 105.8 | 114.1 | 362.4 | 114.72 | 32.1 | 0.0 | 7.4 | 0.0 | 38.6 |
| 11.08 | 158.0 | 66.01 | 112.1 | 104.8 | 110.3 | 108.5 | 114.5 | 311.5 | 105.97 | 52.3 | 6.7 | 36.0 | 30.6 | 62.7 |
| 12.28 | 142.6 | 60.87 | 112.3 | 107.1 | 111.2 | 109.7 | 114.3 | 281.1 | 100.24 | 65.6 | 27.0 | 54.8 | 49.6 | 75.5 |
| 14.59 | 120.0 | 52.98 | 108.4 | 105.8 | 108.6 | 107.3 | 110.4 | 236.5 | 91.02 | 77.5 | 57.2 | 77.6 | 71.0 | 88.7 |
| 16.83 | 104.0 | 47.09 | 103.2 | 101.3 | 103.4 | 102.4 | 104.6 | 204.9 | 83.79 | 82.5 | 67.7 | 82.1 | 78.1 | 90.1 |
| 19.78 | 88.5 | 41.13 | 101.8 | 100.9 | 102.2 | 101.5 | 103.1 | 174.4 | 76.05 | 90.2 | 81.4 | 90.2 | 87.7 | 95.0 |
| 21.18 | 82.6 | 29.24 | 84.1 | 82.7 | 83.8 | 83.5 | 83.3 | 162.9 | 43.88 | 72.6 | 62.9 | 70.0 | 69.6 | 67.3 |
| 24.89 | 70.3 | 26.63 | 83.1 | 82.3 | 83.0 | 82.8 | 82.6 | 138.6 | 39.96 | 75.5 | 70.1 | 74.6 | 74.2 | 72.6 |
| 28.56 | 61.3 | 24.54 | 78.2 | 77.7 | 78.1 | 78.1 | 77.8 | 120.8 | 36.83 | 73.2 | 69.1 | 72.4 | 72.1 | 71.0 |
| 33.71 | 51.9 | 22.19 | 72.1 | 71.9 | 72.1 | 72.1 | 72.0 | 102.4 | 33.30 | 69.5 | 66.7 | 68.8 | 68.8 | 67.9 |
| 36.54 | 47.9 | 21.11 | 70.5 | 70.1 | 70.4 | 70.4 | 70.2 | 94.4 | 31.69 | 68.8 | 66.5 | 68.0 | 68.2 | 67.5 |
| 40.62 | 43.1 | 19.76 | 66.8 | 66.7 | 66.8 | 66.8 | 66.7 | 84.9 | 29.66 | 65.9 | 64.4 | 65.6 | 65.7 | 65.2 |
| 44.12 | 39.7 | 18.76 | 63.7 | 63.4 | 63.7 | 63.5 | 63.5 | 78.2 | 28.15 | 63.3 | 61.9 | 62.9 | 63.1 | 62.6 |
| 48.81 | 35.9 | 17.12 | 60.9 | 60.8 | 62.1 | 62.1 | 60.8 | 70.7 | 26.21 | 61.2 | 59.9 | 61.0 | 61.2 | 60.6 |
| 52.40 | 33.4 | 15.95 | 58.0 | 57.8 | 58.0 | 58.0 | 57.9 | 65.8 | 24.92 | 58.6 | 57.5 | 58.1 | 58.6 | 58.0 |
| 56.47 | 31.0 | 14.80 | 55.4 | 55.3 | 55.3 | 55.4 | 55.3 | 61.1 | 23.63 | 56.4 | 55.3 | 55.8 | 56.1 | 55.8 |
| 61.12 | 28.6 | 13.67 | 52.7 | 52.7 | 52.7 | 52.7 | 52.7 | 56.4 | 22.34 | 54.0 | 53.1 | 53.5 | 53.7 | 53.5 |
| 66.48 | 26.3 | 12.57 | 50.8 | 50.0 | 50.0 | 50.8 | 50.0 | 51.9 | 21.05 | 51.5 | 50.6 | 51.1 | 51.5 | 51.1 |
| 72.74 | 24.1 | 11.49 | 47.2 | 47.1 | 47.2 | 47.2 | 47.1 | 47.4 | 18.94 | 48.7 | 48.1 | 48.3 | 48.7 | 48.5 |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 108, 9.52:1, 1750 RPM input speed, 280TC motor frame at 120 degree F ambient, A4 mounting position:

According to the table above, this unit is capable of 105.8 HP Thermally at 68 degree F. To convert this to the capability at 120 degrees F, multiply the rating by the factor in the Thermal Factors table (0.47). Actual Thermal Rating is $105.8 \times 0.47 = 49.726$ HP. The mechanical rating for the MSM 108, 9.52, 280TC frame is 74.16 HP. This unit is now thermally limited to 49.726 HP.

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|----------------------------|-----------------------------------|------------------------------------|-------------------------|
| NOMENCLATURE PAGE MSM-4 | MOUNTING POSITIONS PAGE MSM-10 | SELECTION GEARMOTOR PAGE MSM-62 | WEIGHTS PAGE MSM-250 |
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THERMAL RATINGS



THERMAL RATINGS - MSM 128

The Thermal HP ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | | 3450 RPM | | | | | | | |
|-------|--------------|---------------|-------------------|-------|-------|-------|--------|--------------|---------------|-------------|-------------------|-------|-------|--------|--|--|
| | Output Speed | Rated Power | Mounting Position | | | | | | Output Speed | Rated Power | Mounting Position | | | | | |
| | | | A1 | A2 | A3 | A4 | A5, A6 | A1 | | | A2 | A3 | A4 | A5, A6 | | |
| | RPM | HP | HP | HP | HP | HP | HP | RPM | HP | HP | HP | HP | HP | HP | | |
| 6.86 | 255.2 | 133.21 | 140.7 | 115.5 | 138.4 | 119.4 | 152.3 | 503.2 | 199.92 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | |
| 9.12 | 191.8 | 115.99 | 164.1 | 142.6 | 161.3 | 151.9 | 170.8 | 378.2 | 174.06 | 0.0 | 0.0 | 0.0 | 0.0 | 15.8 | | |
| 10.56 | 165.7 | 107.48 | 175.3 | 163.5 | 177.0 | 169.1 | 182.3 | 326.6 | 161.31 | 41.4 | 0.0 | 47.9 | 10.4 | 81.3 | | |
| 12.47 | 140.3 | 98.14 | 170.0 | 162.1 | 171.3 | 166.5 | 175.1 | 276.6 | 147.43 | 83.6 | 27.0 | 88.9 | 60.5 | 114.2 | | |
| 13.92 | 125.7 | 89.76 | 167.4 | 161.8 | 168.5 | 165.0 | 171.2 | 247.8 | 138.63 | 106.7 | 62.3 | 110.7 | 90.2 | 130.3 | | |
| 16.27 | 107.6 | 78.94 | 160.7 | 157.7 | 162.1 | 159.6 | 163.8 | 212.0 | 126.76 | 123.8 | 99.5 | 133.0 | 117.3 | 143.6 | | |
| 18.65 | 93.8 | 70.38 | 152.2 | 150.2 | 153.2 | 151.7 | 154.4 | 184.9 | 116.96 | 130.6 | 112.7 | 135.9 | 126.3 | 143.9 | | |
| 21.57 | 81.1 | 62.20 | 141.8 | 140.4 | 142.5 | 141.5 | 143.3 | 160.0 | 107.16 | 131.1 | 119.1 | 134.3 | 128.8 | 140.0 | | |
| 22.39 | 78.2 | 60.26 | 146.6 | 145.4 | 147.2 | 146.2 | 147.8 | 154.1 | 104.76 | 139.4 | 129.7 | 142.4 | 137.4 | 147.1 | | |
| 23.96 | 73.0 | 51.99 | 123.7 | 121.3 | 123.5 | 122.9 | 121.8 | 144.0 | 78.02 | 109.8 | 91.9 | 106.0 | 105.4 | 94.5 | | |
| 24.77 | 70.7 | 55.23 | 138.7 | 137.8 | 139.3 | 138.6 | 139.6 | 139.3 | 98.42 | 136.4 | 128.9 | 138.2 | 134.9 | 141.9 | | |
| 27.66 | 63.3 | 46.84 | 121.2 | 119.5 | 121.1 | 120.6 | 119.6 | 124.7 | 70.30 | 111.7 | 98.3 | 109.1 | 108.6 | 100.1 | | |
| 32.50 | 53.9 | 41.68 | 118.0 | 117.1 | 117.9 | 117.6 | 116.8 | 106.2 | 62.56 | 114.3 | 106.6 | 113.1 | 112.7 | 107.4 | | |
| 36.83 | 47.5 | 38.04 | 110.8 | 110.3 | 110.9 | 110.7 | 110.1 | 93.7 | 57.17 | 110.1 | 104.4 | 109.1 | 109.1 | 105.1 | | |
| 43.21 | 40.5 | 32.42 | 101.9 | 101.6 | 102.1 | 101.9 | 101.7 | 79.8 | 50.97 | 103.9 | 99.9 | 103.0 | 103.3 | 100.4 | | |
| 47.14 | 37.1 | 29.72 | 98.5 | 98.1 | 98.5 | 98.5 | 98.1 | 73.2 | 47.89 | 101.7 | 98.5 | 100.7 | 101.2 | 99.1 | | |
| 51.43 | 34.0 | 27.24 | 94.3 | 93.9 | 94.3 | 94.1 | 94.0 | 67.1 | 45.01 | 98.2 | 95.5 | 97.2 | 97.7 | 95.8 | | |
| 55.50 | 31.5 | 25.24 | 90.1 | 89.8 | 90.0 | 90.1 | 89.8 | 62.2 | 42.63 | 94.4 | 92.2 | 93.5 | 94.2 | 92.4 | | |
| 62.03 | 28.2 | 22.59 | 84.8 | 84.6 | 84.7 | 84.7 | 84.6 | 55.6 | 39.39 | 89.8 | 88.0 | 89.0 | 89.6 | 88.4 | | |
| 66.44 | 26.3 | 21.08 | 80.8 | 80.7 | 80.8 | 80.8 | 80.7 | 51.9 | 37.50 | 85.9 | 84.5 | 85.2 | 85.9 | 84.8 | | |
| 71.45 | 24.5 | 19.61 | 77.0 | 76.7 | 76.9 | 76.9 | 76.7 | 48.3 | 33.43 | 82.4 | 81.0 | 81.4 | 82.1 | 81.4 | | |
| 77.17 | 22.7 | 18.15 | 73.2 | 74.4 | 73.1 | 73.2 | 74.4 | 44.7 | 31.23 | 78.6 | 77.6 | 78.0 | 78.6 | 77.9 | | |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 128, 10.56:1, 3450 RPM input speed, 250TC motor frame at 20 degree F ambient, A1 mounting position:

According to the table above, this unit is capable of 41.4 HP Thermally at 68 degree F. To convert this to the capability at 20 degrees F, multiply the rating by the factor in the Thermal Factors table (1.69). Actual Thermal Rating is 41.4*1.69 = 69.966 HP. The mechanical rating for the MSM 128, 10.56:1, 250TC frame is 89.63 HP. This unit is now thermally limited to 69.966 HP.

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| NOMENCLATURE PAGE MSM-4 | MOUNTING POSITIONS PAGE MSM-10 | SELECTION GEARMOTOR PAGE MSM-62 | WEIGHTS PAGE MSM-250 |
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THERMAL RATINGS



THERMAL RATINGS - MSM 148

The Thermal HP ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | 3450 RPM | | | | | | |
|--------------|---------------------|-------------------|-------------------|----------|----------|----------|--------------|---------------------|-------------------|-------------------|----------|----------|----------|--------------|
| | Output Speed RPM | Rated Power HP | Mounting Position | | | | | Output Speed RPM | Rated Power HP | Mounting Position | | | | |
| | | | A1 HP | A2 HP | A3 HP | A4 HP | A5, A6 HP | | | A1 HP | A2 HP | A3 HP | A4 HP | A5, A6 HP |
| 7.54 | 232.0 | 158.78 | 189.6 | 159.9 | 200.8 | 164.4 | 216.3 | 457.3 | 269.08 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.86 | 177.5 | 135.62 | 218.8 | 194.3 | 223.1 | 205.0 | 233.6 | 350.0 | 233.86 | 0.0 | 0.0 | 0.0 | 0.0 | 42.4 |
| 11.61 | 150.7 | 118.96 | 228.1 | 214.3 | 233.2 | 221.0 | 239.1 | 297.2 | 212.55 | 61.0 | 0.0 | 91.0 | 22.5 | 131.1 |
| 13.32 | 131.4 | 106.60 | 223.0 | 213.7 | 227.4 | 218.5 | 231.1 | 259.1 | 195.15 | 111.2 | 41.3 | 136.5 | 83.7 | 167.8 |
| 14.68 | 119.2 | 100.04 | 220.2 | 213.4 | 223.5 | 217.8 | 227.8 | 235.1 | 183.16 | 141.9 | 88.0 | 163.5 | 123.0 | 186.4 |
| 17.35 | 100.8 | 91.16 | 207.6 | 204.7 | 210.2 | 206.4 | 213.0 | 198.8 | 163.28 | 169.7 | 137.8 | 185.7 | 160.5 | 198.8 |
| 19.78 | 88.5 | 81.47 | 196.1 | 192.9 | 197.3 | 194.5 | 198.8 | 174.4 | 148.67 | 176.4 | 154.3 | 186.9 | 171.3 | 196.9 |
| 22.74 | 76.9 | 72.24 | 181.9 | 180.9 | 182.7 | 181.1 | 183.6 | 151.7 | 133.10 | 176.4 | 161.6 | 182.5 | 173.3 | 189.4 |
| 26.00 | 67.3 | 64.28 | 176.1 | 175.4 | 177.0 | 176.0 | 177.4 | 132.7 | 118.50 | 181.5 | 172.4 | 185.3 | 180.0 | 189.9 |
| 26.51 | 66.0 | 74.17 | 166.4 | 163.2 | 166.4 | 165.4 | 163.0 | 130.1 | 113.66 | 153.1 | 149.1 | 150.9 | 147.9 | 130.7 |
| 30.39 | 57.6 | 64.69 | 157.1 | 155.2 | 157.0 | 156.8 | 154.9 | 113.5 | 111.96 | 152.9 | 135.3 | 150.9 | 149.0 | 136.6 |
| 35.14 | 49.8 | 55.95 | 147.0 | 145.3 | 147.0 | 146.4 | 145.3 | 98.2 | 92.52 | 148.4 | 136.6 | 147.3 | 146.1 | 137.1 |
| 36.47 | 48.0 | 53.91 | 150.3 | 149.1 | 150.2 | 150.1 | 149.1 | 94.6 | 100.03 | 154.1 | 144.9 | 153.6 | 152.5 | 145.4 |
| 40.36 | 43.4 | 48.72 | 142.8 | 141.8 | 142.7 | 142.6 | 141.7 | 85.5 | 87.52 | 149.3 | 142.0 | 148.4 | 147.9 | 142.4 |
| 47.23 | 37.1 | 41.63 | 131.0 | 130.3 | 131.0 | 130.6 | 130.3 | 73.0 | 82.06 | 140.1 | 135.5 | 139.2 | 139.2 | 135.5 |
| 51.15 | 34.2 | 38.44 | 126.4 | 126.1 | 126.4 | 126.4 | 125.9 | 67.4 | 75.16 | 136.9 | 133.0 | 136.1 | 136.1 | 133.4 |
| 57.09 | 30.7 | 34.44 | 118.7 | 118.3 | 118.7 | 118.7 | 118.3 | 60.4 | 67.89 | 129.8 | 127.0 | 129.1 | 129.4 | 127.0 |
| 60.53 | 28.9 | 32.48 | 114.6 | 114.3 | 114.5 | 114.5 | 114.3 | 57.0 | 64.04 | 126.1 | 123.5 | 125.1 | 125.8 | 123.8 |
| 68.61 | 25.5 | 28.42 | 106.2 | 107.8 | 106.1 | 106.1 | 107.8 | 50.3 | 56.49 | 118.1 | 116.2 | 117.2 | 117.5 | 116.7 |
| 73.42 | 23.8 | 26.78 | 101.0 | 100.9 | 101.0 | 101.0 | 100.9 | 47.0 | 52.80 | 113.1 | 111.2 | 112.0 | 112.6 | 111.5 |
| 77.21 | 22.7 | 19.21 | 98.0 | 97.9 | 98.0 | 98.0 | 97.9 | 44.7 | 32.63 | 109.7 | 108.1 | 109.2 | 109.7 | 108.6 |
| 83.32 | 21.0 | 17.98 | 93.1 | 92.9 | 93.0 | 93.0 | 93.0 | 41.4 | 30.48 | 104.8 | 103.4 | 104.1 | 104.5 | 103.6 |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 148, 14.68:1, 3450 RPM input speed, 280TC motor frame at 60 degree F ambient, A3 mounting position:

According to the table above, this unit is capable of 163.5 HP Thermally at 68 degree F. To convert this to the capability at 60 degrees F, multiply the rating by the factor in the Thermal Factors table (1.09). Actual Thermal Rating is 163.5*1.09 = 178.215 HP. The mechanical rating for the MSM 148, 14.68:1, 280TC frame is 170.81 HP. This unit is not thermally limited.

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| NOMENCLATURE PAGE MSM-4 | MOUNTING POSITIONS PAGE MSM-10 | SELECTION GEARMOTOR PAGE MSM-62 | WEIGHTS PAGE MSM-250 |
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THERMAL RATINGS



THERMAL RATINGS - MSM 168

The Thermal HP ratings shown in the table below are based on an ambient temperature of 68°F, continuous operation, and fan cooled motors, as well as with the standard ISO VG220 factory filled lubricant. If using a different lubricant, please contact Application Engineering. Shaded values indicate that the unit is thermally limited.

| Ratio | 1750 RPM | | | | | | | 3450 RPM | | | | | | |
|-------|--------------|---------------|-------------------|-------|-------|-------|--------|--------------|---------------|-------------------|-------|-------|-------|--------|
| | Output Speed | Rated Power | Mounting Position | | | | | Output Speed | Rated Power | Mounting Position | | | | |
| | | | A1 | A2 | A3 | A4 | A5, A6 | | | A1 | A2 | A3 | A4 | A5, A6 |
| RPM | HP | HP | HP | HP | HP | HP | RPM | HP | HP | HP | HP | HP | HP | |
| 7.71 | 226.8 | 158.78 | 216.3 | 191.3 | 241.7 | 193.4 | 254.3 | 447.2 | 297.84 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 9.71 | 180.2 | 145.07 | 265.7 | 225.8 | 290.2 | 237.9 | 304.5 | 355.3 | 265.63 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 12.47 | 140.4 | 126.00 | 294.9 | 269.2 | 306.0 | 281.4 | 315.9 | 276.7 | 230.69 | 0.0 | 0.0 | 44.5 | 0.0 | 104.7 |
| 14.51 | 120.6 | 114.15 | 302.8 | 288.6 | 312.4 | 295.6 | 318.1 | 237.8 | 210.05 | 102.3 | 12.7 | 167.8 | 58.4 | 206.1 |
| 16.53 | 105.8 | 105.33 | 295.8 | 286.0 | 303.1 | 291.7 | 307.3 | 208.7 | 192.83 | 167.0 | 87.3 | 215.7 | 139.3 | 245.4 |
| 18.13 | 96.5 | 98.91 | 291.2 | 284.0 | 296.9 | 288.5 | 300.2 | 190.3 | 181.08 | 204.8 | 144.6 | 242.5 | 185.3 | 265.2 |
| 21.85 | 80.1 | 86.58 | 271.8 | 268.3 | 275.3 | 270.5 | 277.5 | 157.9 | 158.50 | 240.4 | 208.5 | 264.0 | 232.3 | 276.9 |
| 24.28 | 72.1 | 80.06 | 257.7 | 255.0 | 260.3 | 257.0 | 261.9 | 142.1 | 146.53 | 245.3 | 221.2 | 261.9 | 239.7 | 271.9 |
| 27.50 | 63.6 | 72.73 | 240.6 | 238.8 | 242.4 | 240.1 | 243.4 | 125.4 | 133.14 | 243.6 | 226.9 | 254.4 | 240.4 | 261.7 |
| 31.83 | 55.0 | 64.77 | 217.8 | 217.0 | 218.4 | 217.5 | 218.7 | 108.4 | 118.55 | 241.2 | 234.7 | 244.4 | 241.3 | 248.1 |
| 32.07 | 54.6 | 89.21 | 219.6 | 215.8 | 220.1 | 218.7 | 217.6 | 107.6 | 187.35 | 212.6 | 182.5 | 213.6 | 207.1 | 197.6 |
| 36.55 | 47.9 | 81.21 | 223.5 | 204.5 | 207.4 | 206.8 | 205.6 | 94.4 | 164.37 | 209.9 | 189.7 | 210.8 | 206.8 | 199.4 |
| 42.03 | 41.6 | 72.51 | 193.3 | 191.2 | 193.3 | 192.5 | 192.1 | 82.1 | 142.95 | 203.7 | 189.1 | 203.7 | 201.4 | 196.0 |
| 48.04 | 36.4 | 63.43 | 186.6 | 185.5 | 186.7 | 191.7 | 185.8 | 71.8 | 125.05 | 202.9 | 194.2 | 203.6 | 202.6 | 220.6 |
| 55.68 | 31.4 | 54.74 | 171.4 | 170.6 | 171.5 | 171.4 | 170.8 | 62.0 | 107.91 | 190.5 | 184.7 | 190.5 | 189.9 | 187.6 |
| 60.66 | 28.8 | 50.24 | 164.4 | 164.0 | 164.8 | 164.4 | 164.2 | 56.9 | 99.04 | 185.1 | 180.4 | 184.6 | 184.1 | 182.5 |
| 67.58 | 25.9 | 45.10 | 154.0 | 153.6 | 154.3 | 153.9 | 153.8 | 51.1 | 88.91 | 175.0 | 171.7 | 174.5 | 174.5 | 173.1 |
| 71.58 | 24.4 | 42.57 | 148.6 | 148.1 | 148.6 | 148.6 | 148.2 | 48.2 | 83.93 | 169.8 | 166.7 | 168.9 | 169.3 | 168.0 |
| 80.50 | 21.7 | 28.78 | 138.1 | 137.7 | 138.1 | 138.1 | 137.8 | 42.9 | 47.38 | 159.2 | 156.8 | 158.4 | 158.8 | 157.6 |
| 86.06 | 20.3 | 27.18 | 131.4 | 131.3 | 131.4 | 131.4 | 131.3 | 40.1 | 44.58 | 152.0 | 150.1 | 151.6 | 152.0 | 150.9 |

| MSM Thermal Factors | |
|-----------------------|----------------|
| Ambient Temp (Deg. F) | Thermal Factor |
| 0 | 1.89 |
| 20 | 1.69 |
| 40 | 1.30 |
| 60 | 1.09 |
| 68 | 1.00 |
| 80 | 0.87 |
| 100 | 0.68 |
| 120 | 0.47 |

Rated power as shown on the table above is for the largest available motor frame for a unit size and ratio. When using the factors in the table, compare result with the actual ratio and motor frame used.

Example: MSM 168, 7.71:1, 1750 RPM input speed, 360TC motor frame at 80 degree F ambient, A4 mounting position:

According to the table above, this unit is capable of 193.4 HP Thermally at 68 degree F. To convert this to the capability at 80 degrees F, multiply the rating by the factor in the Thermal Factors table (0.87). Actual Thermal Rating is $193.4 \times 0.87 = 168.258$ HP. The mechanical rating for the MSM 168, 7.71:1, 360TC frame is 158.78 HP. This unit is not thermally limited.

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WEIGHTS - MSM 38

| | | | | Output Configuration | | | |
|-------------|--------------------------------|----------------|-------------|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| Unit Size | Input Configuration | Catalog Number | | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| | | NEMA | IEC | | | | |
| 38 | Clamp Collar | MW382CN56C | MW382CI71D | 44 | 20 | 48 | 22 |
| | | -- | MW382CI80D | 49 | 22 | 53 | 24 |
| | | MW382CN140TC | MW382CI90D | 49 | 22 | 53 | 24 |
| | | MW382CN180TC | MW382CI100D | 53 | 24 | 57 | 26 |
| | | MW383CN56C | MW383CI71D | 46 | 21 | 50 | 23 |
| | | -- | MW383CI80D | 52 | 24 | 56 | 25 |
| | 3 Pc Coupled | MW383CN140TC | MW383CI90D | 52 | 24 | 56 | 25 |
| | | MW382LN56C | -- | 51 | 23 | 55 | 25 |
| | | -- | MW382LI80D | 66 | 30 | 70 | 32 |
| | | MW382LN140TC | MW382LI90D | 66 | 30 | 70 | 32 |
| | | -- | MW382LI100D | 76 | 34 | 80 | 36 |
| | | MW383LN56C | -- | 52 | 24 | 56 | 25 |
| | Separate Group (Inch / Metric) | -- | MW383LI80D | 68 | 31 | 72 | 33 |
| | | MW383LN140TC | MW383LI90D | 68 | 31 | 72 | 33 |
| | | MW382SI71 | MW382SM71 | 51 | 23 | 55 | 25 |
| | | MW382SI80 | MW382SM80 | 59 | 27 | 63 | 29 |
| | | MW382SI90 | MW382SM90 | 59 | 27 | 63 | 29 |
| | | MW382SI100 | MW382SM100 | 66 | 30 | 70 | 32 |
| | Integral Gearmotor (HP) | MW383SI71 | MW383SM71 | 54 | 24 | 58 | 26 |
| | | MW383SI80 | MW383SM80 | 61 | 28 | 65 | 29 |
| | | MW383SI90 | MW383SM90 | 61 | 28 | 65 | 29 |
| | | MW382GH71C4 | --- | 53 | 24 | 57 | 26 |
| | | MW382GH71D4 | | 53 | 24 | 57 | 26 |
| | | MW382GH71E4 | | 57 | 26 | 61 | 28 |
| | | MW382GH80F4 | | 57 | 26 | 61 | 28 |
| | | MW382GH80G4 | | 60 | 27 | 64 | 29 |
| | | MW382GH90H4 | | 65 | 29 | 69 | 31 |
| | | MW382GH90I4 | | 70 | 32 | 74 | 34 |
| | | MW382GH100J4 | | 77 | 35 | 81 | 37 |
| | | MW383GH71C4 | | 55 | 25 | 59 | 27 |
| MW383GH71D4 | | 55 | | 25 | 59 | 27 | |
| MW383GH71E4 | | 59 | | 27 | 63 | 29 | |
| MW383GH80F4 | 59 | 27 | | 63 | 29 | | |
| MW383GH80G4 | 63 | 29 | | 67 | 30 | | |
| MW383GH90H4 | 67 | 30 | | 71 | 32 | | |
| MW383GH90I4 | 72 | 33 | 76 | 34 | | | |

* Weights are Approximate
(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 48

| Unit Size | Input Configuration | Catalog Number | | Output Configuration | | | |
|--------------|-----------------------------------|----------------|------------------|----------------------|------------------|-----------------|----|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| | NEMA | IEC | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) | |
| 48 | Clamp Collar | MW482CN56C | MW482CI71D | 68 | 31 | 74 | 34 |
| | | | MW482CI80D | 73 | 33 | 79 | 36 |
| | | MW482CN140TC | MW482CI90D | 73 | 33 | 79 | 36 |
| | | MW482CN180TC | MW482CI100D | 78 | 35 | 84 | 38 |
| | | -- | MW482CI112D | 80 | 36 | 86 | 39 |
| | | MW483CN56C | MW483CI71D | 70 | 32 | 76 | 34 |
| | | -- | MW483CI80D | 75 | 34 | 81 | 37 |
| | | MW483CN140TC | MW483CI90D | 75 | 34 | 81 | 37 |
| | | MW483CN180TC | MW483CI100D | 80 | 36 | 86 | 39 |
| | | MW482LN56C | -- | 74 | 34 | 80 | 36 |
| | | -- | MW482LI80D | 90 | 41 | 96 | 44 |
| | | MW482LN140TC | MW482LI90D | 90 | 41 | 96 | 44 |
| | | MW482LN180TC | MW482LI100D | 101 | 46 | 107 | 49 |
| | | -- | MW482LI112D | 103 | 47 | 109 | 49 |
| | MW483LN56C | -- | 75 | 34 | 81 | 37 | |
| | -- | MW483LI80D | 92 | 42 | 98 | 44 | |
| | MW483LN140TC | MW483LI90D | 92 | 42 | 98 | 44 | |
| | MW483LN180TC | MW483LI100D | 103 | 47 | 109 | 49 | |
| | Separate Group (Inch / Metric) | MW482SI71 | MW482SM71 | 73 | 33 | 79 | 36 |
| | | MW482SI80 | MW482SM80 | 80 | 36 | 86 | 39 |
| | | MW482SI90 | MW482SM90 | 80 | 36 | 86 | 39 |
| | | MW482SI100 | MW482SM100 | 89 | 40 | 95 | 43 |
| | | MW482SI112 | MW482SM112 | 92 | 42 | 98 | 44 |
| | | MW483SI71 | MW483SM71 | 75 | 34 | 81 | 37 |
| | | MW483SI80 | MW483SM80 | 82 | 37 | 88 | 40 |
| | | MW483SI90 | MW483SM90 | 82 | 37 | 88 | 40 |
| | | MW483SI100 | MW483SM100 | 91 | 41 | 97 | 44 |
| | Integral Gearmotor (HP) | MW482GH71C4 | | 77 | 35 | 83 | 38 |
| | | MW482GH71D4 | | 77 | 35 | 83 | 38 |
| | | MW482GH71E4 | | 81 | 37 | 87 | 39 |
| | | MW482GH80F4 | | 81 | 37 | 87 | 39 |
| | | MW482GH80G4 | | 84 | 38 | 90 | 41 |
| | | MW482GH90H4 | | 89 | 40 | 95 | 43 |
| | | MW482GH90I4 | | 94 | 43 | 100 | 45 |
| | | MW482GH100J4 | | 101 | 46 | 107 | 49 |
| | | MW482GH112L4 | -- | 123 | 56 | 129 | 59 |
| | | MW483GH71C4 | | 79 | 36 | 85 | 39 |
| | | MW483GH71D4 | | 79 | 36 | 85 | 39 |
| | | MW483GH71E4 | | 83 | 38 | 89 | 40 |
| | | MW483GH80F4 | | 83 | 38 | 89 | 40 |
| | | MW483GH80G4 | | 86 | 39 | 92 | 42 |
| | | MW483GH90H4 | | 91 | 41 | 97 | 44 |
| MW483GH90I4 | | | 96 | 44 | 102 | 46 | |
| MW483GH100J4 | | | 103 | 47 | 109 | 49 | |

* Weights are Approximate

(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 68

| | | | | Output Configuration | | | |
|--------------|--------------------------------|----------------|-------------|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| Unit Size | Input Configuration | Catalog Number | | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| | | NEMA | IEC | | | | |
| 68 | Clamp Collar | MW682CN56C | MW682CI71D | 105 | 48 | 115 | 52 |
| | | -- | MW682CI80D | 111 | 50 | 121 | 55 |
| | | MW682CN140TC | MW682CI90D | 111 | 50 | 121 | 55 |
| | | MW682CN180TC | MW682CI100D | 115 | 52 | 125 | 57 |
| | | -- | MW682CI112D | 118 | 54 | 128 | 58 |
| | | MW682CN210TC | MW682CI132D | 134 | 61 | 144 | 65 |
| | | MW683CN56C | MW683CI71D | 110 | 50 | 120 | 54 |
| | | -- | MW683CI80D | 116 | 53 | 126 | 57 |
| | | MW683CN140TC | MW683CI90D | 116 | 53 | 126 | 57 |
| | | MW683CN180TC | MW683CI100D | 120 | 54 | 130 | 59 |
| | 3 Pc Coupled | MW682LN56C | -- | 110 | 50 | 120 | 54 |
| | | -- | MW682LI80D | 127 | 58 | 137 | 62 |
| | | MW682LN140TC | MW682LI90D | 127 | 58 | 137 | 62 |
| | | MW682LN180TC | MW682LI100D | 138 | 63 | 148 | 67 |
| | | -- | MW682LI112D | 142 | 64 | 152 | 69 |
| | | MW682LN210TC | MW682LI132D | 164 | 74 | 174 | 79 |
| | | MW683LN56C | -- | 112 | 51 | 122 | 55 |
| | | -- | MW683LI80D | 132 | 60 | 142 | 64 |
| | MW683LN140TC | MW683LI90D | 132 | 60 | 142 | 64 | |
| | MW683LN180TC | MW683LI100D | 143 | 65 | 153 | 69 | |
| | Separate Group (Inch / Metric) | MW682SI71 | MW682SM71 | 110 | 50 | 120 | 54 |
| | | MW682SI80 | MW682SM80 | 118 | 54 | 128 | 58 |
| | | MW682SI90 | MW682SM90 | 118 | 54 | 128 | 58 |
| | | MW682SI100 | MW682SM100 | 127 | 58 | 137 | 62 |
| | | MW682SI112 | MW682SM112 | 130 | 59 | 140 | 63 |
| | | MW682SI132 | MW682SM132 | 155 | 70 | 165 | 75 |
| | | MW683SI71 | MW683SM71 | 115 | 52 | 125 | 57 |
| | | MW683SI80 | MW683SM80 | 123 | 56 | 133 | 60 |
| | MW683SI90 | MW683SM90 | 123 | 56 | 133 | 60 | |
| | MW683SI100 | MW683SM100 | 132 | 60 | 142 | 64 | |
| | Integral Gearmotor (HP) | MW682GH71C4 | -- | 114 | 52 | 124 | 56 |
| | | MW682GH71D4 | | 114 | 52 | 124 | 56 |
| | | MW682GH71E4 | | 118 | 54 | 128 | 58 |
| | | MW682GH80F4 | | 118 | 54 | 128 | 58 |
| | | MW682GH80G4 | | 122 | 55 | 132 | 60 |
| | | MW682GH90H4 | | 126 | 57 | 136 | 62 |
| | | MW682GH90I4 | | 132 | 60 | 142 | 64 |
| | | MW682GH100J4 | | 139 | 63 | 149 | 68 |
| | | MW682GH112L4 | | 161 | 73 | 171 | 78 |
| | | MW682GH132M4 | | 230 | 104 | 240 | 109 |
| MW682GH132N4 | | 261 | | 118 | 271 | 123 | |
| MW683GH71C4 | | 120 | | 54 | 130 | 59 | |

* Weights are Approximate

(L) - See Footnotes page on the inside back cover

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WEIGHTS



WEIGHTS - MSM 68 (Continued)

| Unit Size | Input Configuration | Catalog Number | | Output Configuration | | | |
|-----------|-------------------------------------|----------------|-----|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| | | NEMA | IEC | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| 68 | Integral Gearmotor (HP) (Continued) | MW683GH71D4 | -- | 120 | 54 | 130 | 59 |
| | | MW683GH71E4 | | 124 | 56 | 134 | 61 |
| | | MW683GH80F4 | | 124 | 56 | 134 | 61 |
| | | MW683GH80G4 | | 127 | 58 | 137 | 62 |
| | | MW683GH90H4 | | 131 | 59 | 141 | 64 |
| | | MW683GH90I4 | | 137 | 62 | 147 | 67 |
| | | MW683GH100J4 | | 144 | 65 | 154 | 70 |

* Weights are Approximate
(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 88

| | | | | Output Configuration | | | |
|-----------|--------------------------------|----------------|-------------|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| Unit Size | Input Configuration | Catalog Number | | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| | | NEMA | IEC | | | | |
| 88 | Clamp Collar | MW882CN140TC | MW882CI90D | 207 | 94 | 222 | 101 |
| | | MW882CN180TC | MW882CI100D | 209 | 95 | 224 | 102 |
| | | -- | MW882CI112D | 213 | 97 | 228 | 103 |
| | | MW882CN210TC | MW882CI132D | 226 | 102 | 241 | 109 |
| | | MW882CN250TC | MW882CI160D | 248 | 112 | 263 | 119 |
| | | MW883CN56C | MW883CI71D | 204 | 93 | 219 | 99 |
| | | -- | MW883CI80D | 210 | 95 | 225 | 102 |
| | | MW883CN140TC | MW883CI90D | 210 | 95 | 225 | 102 |
| | | MW883CN180TC | MW883CI100D | 214 | 97 | 229 | 104 |
| | | -- | MW883CI112D | 217 | 98 | 232 | 105 |
| | MW883CN210TC | MW883CI132D | 232 | 105 | 247 | 112 | |
| | 3 Pc Coupled | MW882LN140TC | MW882LI90D | 224 | 102 | 239 | 108 |
| | | MW882LN180TC | MW882LI100D | 232 | 105 | 247 | 112 |
| | | -- | MW882LI112D | 237 | 107 | 252 | 114 |
| | | MW882LN210TC | MW882LI132D | 255 | 116 | 270 | 122 |
| | | MW882LN250TC | MW882LI160D | 302 | 137 | 317 | 144 |
| | | MW883LN56C | -- | 201 | 91 | 216 | 98 |
| | | -- | MW883LI80D | 226 | 102 | 241 | 109 |
| | | MW883LN140TC | MW883LI90D | 226 | 102 | 241 | 109 |
| | | MW883LN180TC | MW883LI100D | 237 | 107 | 252 | 114 |
| | | -- | MW883LI112D | 240 | 109 | 255 | 116 |
| | MW883LN210TC | MW883LI132D | 261 | 118 | 276 | 125 | |
| | Separate Group (Inch / Metric) | MW882SI90 | MW882SM90 | 214 | 97 | 229 | 104 |
| | | MW882SI100 | MW882SM100 | 220 | 100 | 235 | 107 |
| | | MW882SI112 | MW882SM112 | 225 | 102 | 240 | 109 |
| | | MW882SI132 | MW882SM132 | 246 | 112 | 261 | 118 |
| | | MW882SI160 | MW882SM160 | 269 | 122 | 284 | 129 |
| | | MW883SI71 | MW883SM71 | 209 | 95 | 224 | 102 |
| | | MW883SI80 | MW883SM80 | 216 | 98 | 231 | 105 |
| | | MW883SI90 | MW883SM90 | 217 | 98 | 232 | 105 |
| | | MW883SI100 | MW883SM100 | 225 | 102 | 240 | 109 |
| | | MW883SI112 | MW883SM112 | 228 | 103 | 243 | 110 |
| | MW883SI132 | MW883SM132 | 252 | 114 | 267 | 121 | |
| | Integral Gearmotor (HP) | MW882GH90H4 | -- | 223 | 101 | 238 | 108 |
| | | MW882GH90I4 | | 228 | 103 | 243 | 110 |
| | | MW882GH100J4 | | 232 | 105 | 247 | 112 |
| | | MW882GH112L4 | | 256 | 116 | 271 | 123 |
| | | MW882GH132M4 | | 322 | 146 | 337 | 153 |
| | | MW882GH132N4 | | 353 | 160 | 368 | 167 |
| | | MW883GH71C4 | | 213 | 97 | 228 | 103 |

* Weights are Approximate

(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 88 (Continued)

| | | | | Output Configuration | | | |
|-----------|-------------------------------------|----------------|-----|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| Unit Size | Input Configuration | Catalog Number | | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| | | NEMA | IEC | | | | |
| 88 | Integral Gearmotor (HP) (Continued) | MW883GH71D4 | -- | 213 | 97 | 228 | 103 |
| | | MW883GH71E4 | | 217 | 98 | 232 | 105 |
| | | MW883GH80F4 | | 217 | 98 | 232 | 105 |
| | | MW883GH80G4 | | 221 | 100 | 236 | 107 |
| | | MW883GH90H4 | | 225 | 102 | 240 | 109 |
| | | MW883GH90I4 | | 231 | 105 | 246 | 112 |
| | | MW883GH100J4 | | 237 | 107 | 252 | 114 |
| | | MW883GH112L4 | | 260 | 118 | 275 | 125 |
| | | MW883GH132M4 | | 328 | 149 | 343 | 156 |

* Weights are Approximate

(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 108

| Unit Size | Input Configuration | Catalog Number | | Output Configuration | | | |
|-------------|-----------------------------------|----------------|------------------|----------------------|------------------|-----------------|-----|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| | NEMA | IEC | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) | |
| 108 | Clamp Collar | MW1082CN140TC | MW1082CI90D | 290 | 132 | 312 | 141 |
| | | MW1082CN180TC | MW1082CI100D | 293 | 133 | 315 | 143 |
| | | -- | MW1082CI112D | 306 | 139 | 328 | 149 |
| | | MW1082CN210TC | MW1082CI132D | 317 | 144 | 339 | 154 |
| | | MW1082CN250TC | MW1082CI160D | 339 | 154 | 361 | 164 |
| | | MW1082CN280TC | MW1082CI180D | 359 | 163 | 381 | 173 |
| | | -- | MW1082CI200D | 361 | 164 | 383 | 174 |
| | | -- | MW1083CI80D | 307 | 139 | 329 | 149 |
| | | MW1083CN140TC | MW1083CI90D | 306 | 139 | 328 | 149 |
| | | MW1083CN180TC | MW1083CI100D | 311 | 141 | 333 | 151 |
| | | -- | MW1083CI112D | 314 | 142 | 336 | 152 |
| | | MW1083CN210TC | MW1083CI132D | 329 | 149 | 351 | 159 |
| | MW1083CN250TC | MW1083CI160D | 355 | 161 | 377 | 171 | |
| | 3 Pc Coupled | MW1082LN140TC | MW1082LI90D | 307 | 139 | 329 | 149 |
| | | MW1082LN180TC | MW1082LI100D | 315 | 143 | 337 | 153 |
| | | -- | MW1082LI112D | 329 | 149 | 351 | 159 |
| | | MW1082LN210TC | MW1082LI132D | 346 | 157 | 368 | 167 |
| | | MW1082LN250TC | MW1082LI160D | 392 | 178 | 414 | 188 |
| | | MW1082LN280TC | MW1082LI180D | 442 | 200 | 464 | 210 |
| | | -- | MW1082LI200D | 455 | 206 | 477 | 216 |
| | | -- | MW1083LI80D | 323 | 146 | 345 | 156 |
| | | MW1083LN140TC | MW1083LI90D | 323 | 146 | 345 | 156 |
| | | MW1083LN180TC | MW1083LI100D | 334 | 151 | 356 | 161 |
| | | -- | MW1083LI112D | 338 | 153 | 360 | 163 |
| | | MW1083LN210TC | MW1083LI132D | 358 | 162 | 380 | 172 |
| | MW1083LN250TC | MW1083LI160D | 409 | 185 | 431 | 195 | |
| | Separate Group (Inch / Metric) | MW1082SI90 | MW1082SM90 | 308 | 140 | 330 | 150 |
| | | MW1082SI100 | MW1082SM100 | 314 | 142 | 336 | 152 |
| | | MW1082SI112 | MW1082SM112 | 317 | 144 | 339 | 154 |
| | | MW1082SI132 | MW1082SM132 | 337 | 153 | 359 | 163 |
| | | MW1082SI160 | MW1082SM160 | 359 | 163 | 381 | 173 |
| | | MW1082SI180 | MW1082SM180 | 385 | 175 | 407 | 185 |
| | | MW1083SI80 | MW1083SM80 | 313 | 142 | 335 | 152 |
| | | MW1083SI90 | MW1083SM90 | 313 | 142 | 335 | 152 |
| | | MW1083SI100 | MW1083SM100 | 322 | 146 | 344 | 156 |
| | | MW1083SI112 | MW1083SM112 | 326 | 148 | 348 | 158 |
| MW1083SI132 | | MW1083SM132 | 349 | 158 | 371 | 168 | |
| MW1083SI160 | | MW1083SM160 | 375 | 170 | 397 | 180 | |

* Weights are Approximate

(L) - See Footnotes page on the inside back cover

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WEIGHTS



WEIGHTS - MSM 108 (Continued)

| | | | | Output Configuration | | | |
|-----------|-------------------------|----------------|-----|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| Unit Size | Input Configuration | Catalog Number | | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| | | NEMA | IEC | | | | |
| 108 | Integral Gearmotor (HP) | MW1082GH90H4 | -- | 306 | 139 | 328 | 149 |
| | | MW1082GH190I4 | | 312 | 141 | 334 | 151 |
| | | MW1082GH100J4 | | 323 | 146 | 345 | 156 |
| | | MW1082GH112L4 | | 349 | 158 | 371 | 168 |
| | | MW1082GH132M4 | | 413 | 187 | 435 | 197 |
| | | MW1082GH132N4 | | 443 | 201 | 465 | 211 |

* Weights are Approximate
(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 128

| Unit Size | Input Configuration | Catalog Number | | Output Configuration | | | |
|-----------|-----------------------------------|----------------|--------------|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| | | NEMA | IEC | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| 128 | Clamp Collar | MW1282CN180TC | MW1282CI100D | 489 | 222 | 527 | 239 |
| | | -- | MW1282CI112D | 491 | 223 | 529 | 240 |
| | | MW1282CN210TC | MW1282CI132D | 511 | 232 | 549 | 249 |
| | | MW1282CN250TC | MW1282CI160D | 543 | 246 | 581 | 263 |
| | | MW1282CN280TC | MW1282CI180D | 551 | 250 | 589 | 267 |
| | | -- | MW1282CI200D | 554 | 251 | 592 | 268 |
| | | MW1282CN320TC | -- | 588 | 267 | 626 | 284 |
| | | MW1283CN140TC | MW1283CI90D | 511 | 232 | 549 | 249 |
| | | MW1283CN180TC | MW1283CI100D | 515 | 234 | 553 | 251 |
| | | -- | MW1283CI112D | 518 | 235 | 556 | 252 |
| | | MW1283CN210TC | MW1283CI132D | 535 | 243 | 573 | 260 |
| | | MW1283CN250TC | MW1283CI160D | 559 | 254 | 597 | 271 |
| | | MW1283CN280TC | MW1283CI180D | 578 | 262 | 616 | 279 |
| | | -- | MW1283CI200D | 581 | 263 | 619 | 281 |
| | 3 Pc Coupled | MW1282LN180TC | MW1282LI100D | 512 | 232 | 550 | 249 |
| | | -- | MW1282LI112D | 515 | 234 | 539 | 244 |
| | | MW1282LN210TC | MW1282LI132D | 540 | 245 | 578 | 262 |
| | | MW1282LN250TC | MW1282LI160D | 597 | 271 | 635 | 288 |
| | | MW1282LN280TC | MW1282LI180D | 634 | 288 | 672 | 305 |
| | | -- | MW1282LI200D | 648 | 294 | 686 | 311 |
| | | MW1282LN320TC | MW1282LI225D | 753 | 341 | 791 | 359 |
| | | MW1283LN140TC | MW1283LI90D | 528 | 239 | 566 | 257 |
| | | MW1283LN180TC | MW1283LI100D | 538 | 244 | 576 | 261 |
| | | -- | MW1283LI112D | 542 | 246 | 580 | 263 |
| | | MW1283LN210TC | MW1283LI132D | 564 | 256 | 602 | 273 |
| | | MW1283LN250TC | MW1283LI160D | 613 | 278 | 651 | 295 |
| | | MW1283LN280TC | MW1283LI180D | 662 | 300 | 700 | 317 |
| | | -- | MW1283LI200D | 675 | 306 | 713 | 323 |
| | Separate Group (Inch / Metric) | MW1282SI100 | MW1282SM100 | 512 | 232 | 550 | 249 |
| | | MW1282SI112 | MW1282SM112 | 515 | 234 | 553 | 251 |
| | | MW1282SI132 | MW1282SM132 | 531 | 241 | 569 | 258 |
| | | MW1282SI160 | MW1282SM160 | 618 | 280 | 656 | 298 |
| | | MW1282SI180 | MW1282SM180 | 632 | 287 | 670 | 304 |
| | | MW1282SI225 | MW1282SM225 | 695 | 315 | 733 | 332 |
| | | MW1283SI90 | MW1283SM90 | 518 | 235 | 556 | 252 |
| | | MW1283SI100 | MW1283SM100 | 527 | 239 | 565 | 256 |
| | | MW1283SI112 | MW1283SM112 | 530 | 240 | 568 | 258 |
| | | MW1283SI132 | MW1283SM132 | 609 | 276 | 647 | 293 |
| | | MW1283SI160 | MW1283SM160 | 633 | 287 | 671 | 304 |
| | | MW1283SI180 | MW1283SM180 | 658 | 298 | 696 | 316 |

* Weights are Approximate
(L) - See Footnotes page on the inside back cover

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WEIGHTS



WEIGHTS - MSM 128 (Continued)

| Unit Size | Input Configuration | Catalog Number | | Output Configuration | | | |
|-----------|-------------------------|----------------|-----|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| | | NEMA | IEC | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| 128 | Integral Gearmotor (HP) | MW1282GH100J4 | -- | 518 | 235 | 556 | 252 |
| | | MW1282GH112L4 | | 534 | 242 | 572 | 259 |
| | | MW1282GH132M4 | | 607 | 275 | 645 | 293 |
| | | MW1282GH132N4 | | 638 | 289 | 676 | 307 |

* Weights are Approximate
(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 148

| | | | | Output Configuration | | | |
|-----------|--------------------------------|----------------|--------------|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| Unit Size | Input Configuration | Catalog Number | | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| | | NEMA | IEC | | | | |
| 148 | Clamp Collar | MW1482CN210TC | MW1482CI132D | 730 | 331 | 772 | 350 |
| | | MW1482CN250TC | MW1482CI160D | 751 | 341 | 793 | 360 |
| | | MW1482CN280TC | MW1482CI180D | 769 | 349 | 811 | 368 |
| | | -- | MW1482CI200D | 771 | 350 | 813 | 369 |
| | | MW1482CN320TC | -- | 799 | 362 | 841 | 381 |
| | | MW1482CN360TC | -- | 849 | 385 | 891 | 404 |
| | | MW1483CN180TC | MW1483CI100D | 742 | 337 | 784 | 356 |
| | | -- | MW1483CI112D | 744 | 337 | 786 | 356 |
| | | MW1483CN210TC | MW1483CI132D | 759 | 344 | 801 | 363 |
| | | MW1483CN250TC | MW1483CI160D | 782 | 355 | 824 | 374 |
| | | MW1483CN280TC | MW1483CI180D | 800 | 363 | 842 | 382 |
| | | -- | MW1483CI200D | 803 | 364 | 845 | 383 |
| | MW1483CN320TC | -- | 833 | 378 | 875 | 397 | |
| | 3 Pc Coupled | MW1482LN210TC | MW1482LI132D | 759 | 344 | 801 | 363 |
| | | MW1482LN250TC | MW1482LI160D | 804 | 365 | 846 | 384 |
| | | MW1482LN280TC | MW1482LI180D | 852 | 386 | 894 | 405 |
| | | -- | MW1482LI200D | 865 | 392 | 907 | 411 |
| | | MW1482LN320TC | MW1482LI225D | 964 | 437 | 1006 | 456 |
| | | MW1482LN360TC | MW1482LI250D | 1042 | 473 | 1084 | 492 |
| | | MW1483LN180TC | MW1483LI100D | 765 | 347 | 807 | 366 |
| | | -- | MW1483LI112D | 768 | 348 | 810 | 367 |
| | | MW1483LN210TC | MW1483LI132D | 788 | 357 | 830 | 376 |
| | | MW1483LN250TC | MW1483LI160D | 836 | 379 | 878 | 398 |
| | | MW1483LN280TC | MW1483LI180D | 884 | 401 | 926 | 420 |
| | | -- | MW1483LI200D | 897 | 407 | 939 | 426 |
| | MW1483LN320TC | MW1483LI225D | 998 | 453 | 1040 | 472 | |
| | Separate Group (Inch / Metric) | MW1482SI132 | MW1482SM132 | 750 | 340 | 792 | 359 |
| | | MW1482SI160 | MW1482SM160 | 771 | 350 | 813 | 369 |
| | | MW1482SI180 | MW1482SM180 | 795 | 361 | 837 | 380 |
| | | MW1482SI225 | MW1482SM225 | 851 | 386 | 893 | 405 |
| | | MW1482SI250 | MW1482SM250 | 869 | 394 | 911 | 413 |
| | | MW1483SI100 | MW1483SM100 | 754 | 342 | 796 | 361 |
| | | MW1483SI112 | MW1483SM112 | 756 | 343 | 798 | 362 |
| | | MW1483SI132 | MW1483SM132 | 779 | 353 | 821 | 372 |
| | | MW1483SI160 | MW1483SM160 | 802 | 364 | 844 | 383 |
| | | MW1483SI180 | MW1483SM180 | 826 | 375 | 868 | 394 |
| | MW1483SI225 | MW1483SM225 | 885 | 401 | 927 | 420 | |
| | Integral Gearmotor (HP) | MW1482GH132M4 | | 826 | 375 | 868 | 394 |
| | | MW1482GH132N4 | -- | 857 | 389 | 899 | 408 |

* Weights are Approximate
(L) - See Footnotes page on the inside back cover

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WEIGHTS - MSM 168

| | | | | Output Configuration | | | |
|-----------|--------------------------------|----------------|--------------|----------------------|-----------------|------------------|-----------------|
| | | | | Universal Mounting | | | |
| | | | | B14 | | B5 | |
| Unit Size | Input Configuration | Catalog Number | | Weight (lbs) (L) | Weight (Kg) (L) | Weight (lbs) (L) | Weight (Kg) (L) |
| | | NEMA | IEC | | | | |
| 168 | Clamp Collar | MW1682CN210TC | MW1682CI132D | 1181 | 536 | 1252 | 568 |
| | | MW1682CN250TC | MW1682CI160D | 1201 | 545 | 1272 | 577 |
| | | MW1682CN280TC | MW1682CI180D | 1218 | 552 | 1289 | 585 |
| | | -- | MW1682CI200D | 1221 | 554 | 1292 | 586 |
| | | MW1682CN320TC | -- | 1248 | 566 | 1319 | 598 |
| | | MW1682CN360TC | -- | 1297 | 588 | 1368 | 620 |
| | | MW1683CN210TC | MW1683CI132D | 1215 | 551 | 1286 | 583 |
| | | MW1683CN250TC | MW1683CI160D | 1237 | 561 | 1308 | 593 |
| | | MW1683CN280TC | MW1683CI180D | 1255 | 569 | 1326 | 601 |
| | | -- | MW1683CI200D | 1258 | 571 | 1329 | 603 |
| | | MW1683CN320TC | -- | 1287 | 584 | 1358 | 616 |
| | | MW1683CN360TC | -- | 1338 | 607 | 1409 | 639 |
| | 3 Pc Coupled | MW1682LN210TC | MW1682LI132D | 1210 | 549 | 1281 | 581 |
| | | MW1682LN250TC | MW1682LI160D | 1254 | 569 | 1325 | 601 |
| | | MW1682LN280TC | MW1682LI180D | 1302 | 590 | 1373 | 623 |
| | | -- | MW1682LI200D | 1315 | 596 | 1386 | 629 |
| | | MW1682LN320TC | MW1682LI225D | 1413 | 641 | 1484 | 673 |
| | | MW1682LN360TC | MW1682LI250D | 1491 | 676 | 1562 | 708 |
| | | MW1683LN210TC | MW1683LI132D | 1244 | 564 | 1315 | 596 |
| | | MW1683LN250TC | MW1683LI160D | 1291 | 585 | 1362 | 618 |
| | | MW1683LN280TC | MW1683LI180D | 1339 | 607 | 1410 | 639 |
| | | MW1683LI200D | -- | 1352 | 613 | 1423 | 645 |
| | | MW1683LN320TC | MW1683LI225D | 1452 | 659 | 1523 | 691 |
| | | MW1683LN360TC | MW1683LI250D | 1532 | 695 | 1603 | 727 |
| | Separate Group (Inch / Metric) | MW1682SI132 | MW1682SM132 | 1201 | 545 | 1272 | 577 |
| | | MW1682SI160 | MW1682SM160 | 1221 | 554 | 1292 | 586 |
| | | MW1682SI180 | MW1682SM180 | 1245 | 565 | 1316 | 597 |
| | | MW1682SI225 | MW1682SM225 | 1300 | 590 | 1371 | 622 |
| | | MW1682SI250 | MW1682SM250 | 1317 | 597 | 1388 | 629 |
| | | MW1683SI132 | MW1683SM132 | 1235 | 560 | 1306 | 592 |
| | | MW1683SI160 | MW1683SM160 | 1257 | 570 | 1328 | 602 |
| | | MW1683SI180 | MW1683SM180 | 1282 | 581 | 1353 | 614 |
| | | MW1683SI225 | MW1683SM225 | 1339 | 607 | 1410 | 639 |
| | | MW1683SI250 | MW1683SM250 | 1359 | 616 | 1430 | 649 |
| | Integral Gearmotor (HP) | MW1682GH132M4 | | 1277 | 579 | 1348 | 611 |
| | | MW1682GH132N4 | -- | 1308 | 593 | 1379 | 625 |

* Weights are Approximate
(L) - See Footnotes page on the inside back cover

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