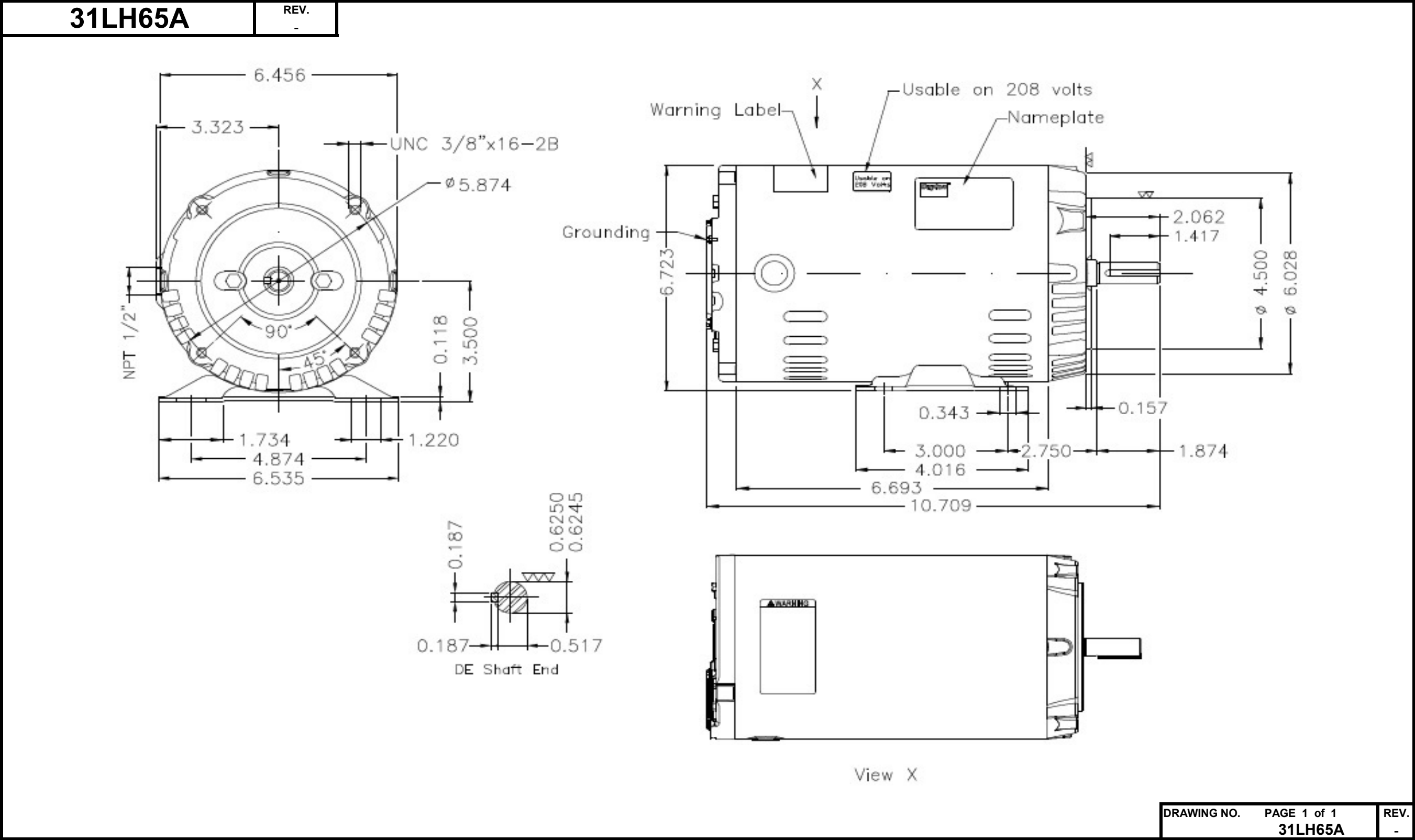


Dimensional Drawing



Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

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DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer

Product line : W01 - ODP - Premium Efficiency

| | | | |
|-----------------------|---------------------------|---------------------------------|--------------------------|
| Frame | : 56C | Locked rotor time | : 23 s (hot) 41 s (cold) |
| Output | : 1 HP (0.75 kW) | Temperature rise ⁴ | : 80 K |
| Poles | : 2 | Duty cycle | : Cont.(S1) |
| Frequency | : 60 Hz | Ambient temperature | : -20 °C to +40 °C |
| Rated voltage | : 230/460 V | Altitude | : 1000 m.a.s.l |
| Rated current | : 3.02/1.51 A | Cooling method | : IC01 - ODP |
| L. R. Amperes | : 19.3/9.66 A | Mounting | : F-1 |
| LRC (p.u.) | : 6.4 Code J | Direct of rotation ¹ | : Both |
| No load current | : 1.90/0.950 A | Noise level ² | : 62.0 dB(A) |
| Rated speed | : 3470 rpm | Starting method | : Direct On Line |
| Slip | : 3.61 % | Approx. weight ³ | : 8.9 kg |
| Rated torque | : 0.209 kgfm | | |
| Locked rotor torque | : 230 % | | |
| Pull up torque | : 195 % | | |
| Breakdown torque | : 260 % | | |
| Insulation class | : F | | |
| Service factor | : 1.25 | | |
| Moment of inertia (J) | : 0.0022 kgm ² | | |

| | | | | | |
|----------------|-------|------|------|------|--|
| Output | Start | 50% | 75% | 100% | Load type: - |
| Efficiency (%) | - | 70.0 | 75.5 | 77.0 | Load torque: - |
| Power factor | 0.70 | 0.60 | 0.73 | 0.81 | Load inertia (J=GD ² /4): - |

| | | | |
|----------------------|------------------|---------------|------------------------------|
| | Drive end | Non drive end | Foundation loads |
| Bearing type | 6204-ZZ | 6202-ZZ | Maximum traction : 14 kgf |
| Lubrication interval | - | - | Maximum compression : 23 kgf |
| Lubricant amount | - | - | |
| Lubricant type | MOBIL POLYREX EM | | |

Notes:

- * Dayton # 31LH65A
- * Connection YY/Y - Document 10003174687

| | | | | |
|-----------|---------------|-----------------|-----------|-----------------|
| Standards | Specification | : MG1 - Part 10 | Vibration | : MG1 - Part 7 |
| | Tests | : MG1 - Part 12 | Tolerance | : MG1 - Part 12 |
| | Noise | : MG1 - Part 9 | | |

This revision replaces and cancels the previous one, which must be eliminated.

- (1) When viewed from the drive end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At the rated point.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG 1-12.

| Rev. | Summary of changes | | Performed | Checked | Date |
|--------------|--------------------|--|-----------|---------------|----------|
| | | | | | |
| Performed by | mrsanchez | | | 181374/2016-A | |
| Checked by | mmoctezuma | | | Page | Revision |
| Date | 21/02/2018 | | | 1/2 | 1 |

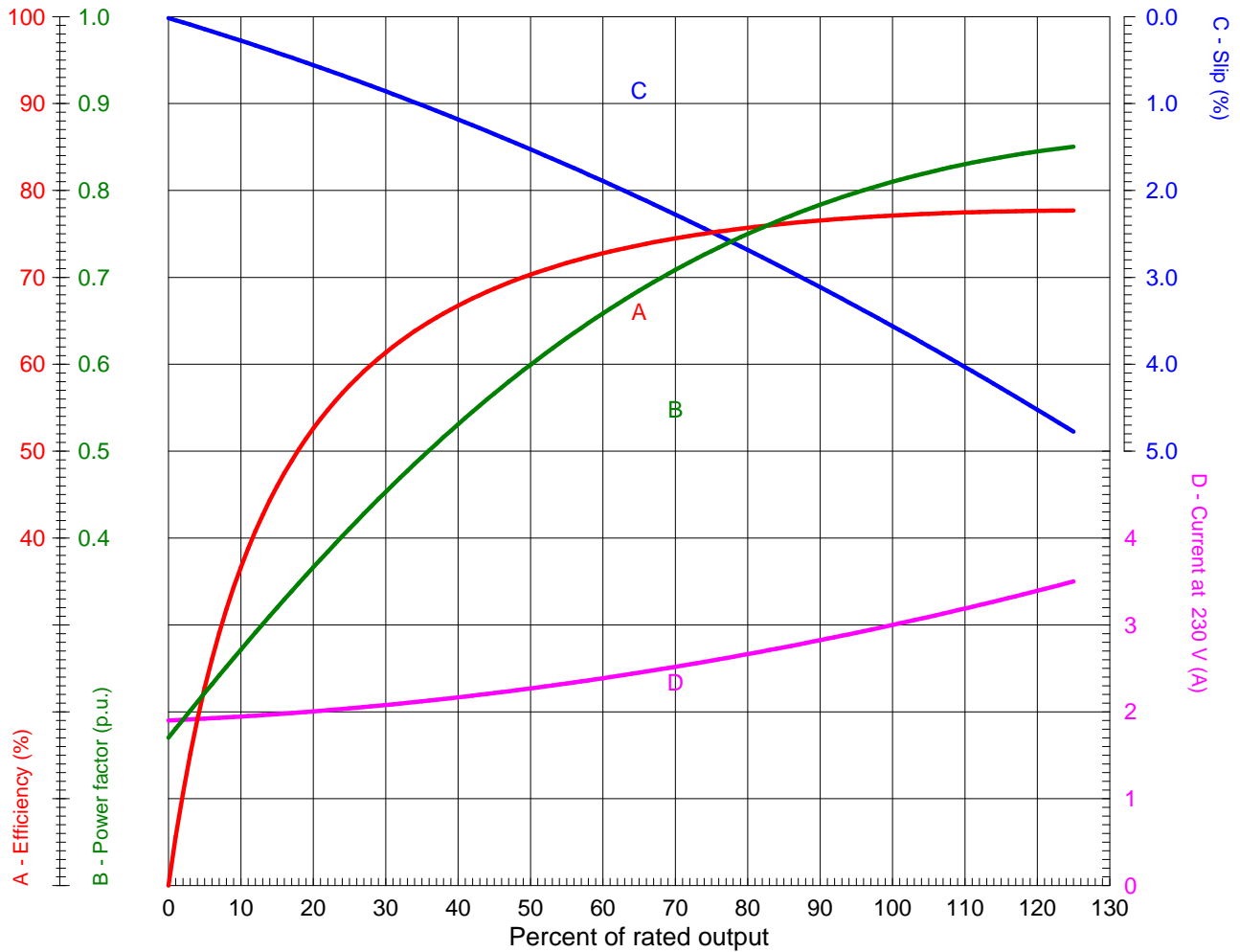
LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer

Product line : W01 - ODP - Premium Efficiency



Performance : 1 HP (0.75 kW) 230/460 V 60 Hz 2P 56C

| | | | |
|---------------------|---------------|-----------------------|---------------------------|
| Rated current | : 3.02/1.51 A | Moment of inertia (J) | : 0.0022 kgm ² |
| LRC (p.u.) | : 6.4 Code J | Duty cycle | : Cont.(S1) |
| Rated torque | : 0.209 kgfm | Insulation class | : F |
| Locked rotor torque | : 230 % | Service factor | : 1.25 |
| Breakdown torque | : 260 % | Temperature rise | : 80 K |
| Rated speed | : 3470 rpm | | |

| Rev. | Summary of changes | Performed | Checked | Date |
|--------------|--------------------|-----------|---------|----------------|
| Performed by | mrsanchez | | | 181374/2016-A1 |
| Checked by | mmoctezuma | | | Page Revision |
| Date | 21/02/2018 | | | 1/1 1 |

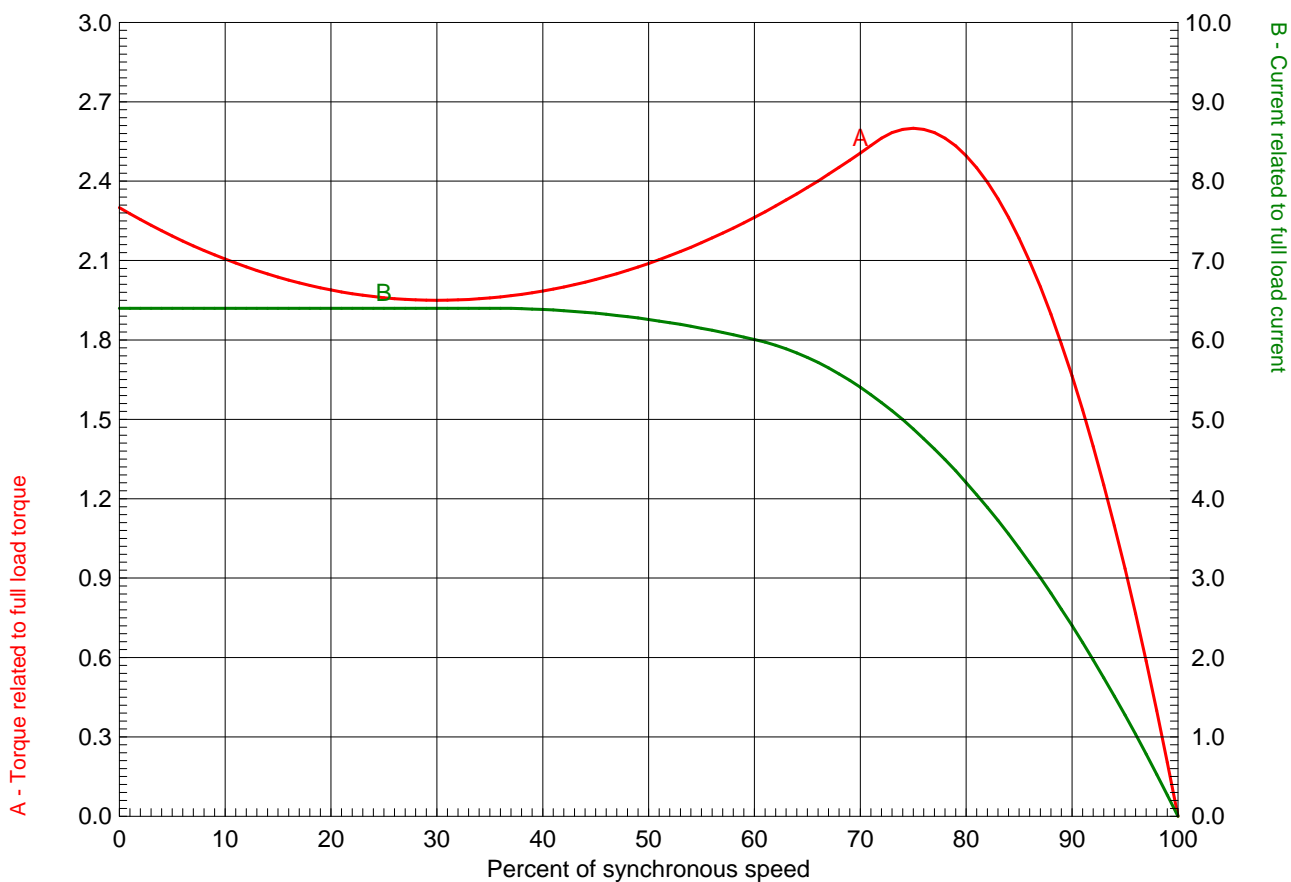
TORQUE AND CURRENT X SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer

Product line : W01 - ODP - Premium Efficiency



Performance : 1 HP (0.75 kW) 230/460 V 60 Hz 2P 56C

| | |
|-----------------------------|---|
| Rated current : 3.02/1.51 A | Moment of inertia (J) : 0.0022 kgm ² |
| LRC (p.u.) : 6.4 Code J | Duty cycle : Cont.(S1) |
| Rated torque : 0.209 kgfm | Insulation class : F |
| Locked rotor torque : 230 % | Service factor : 1.25 |
| Breakdown torque : 260 % | Temperature rise : 80 K |
| Rated speed : 3470 rpm | |

Locked rotor time 100% : 23 s (hot) 41 s (cold)
 Load inertia (J=GD²/4) : 0.0022 kgm²

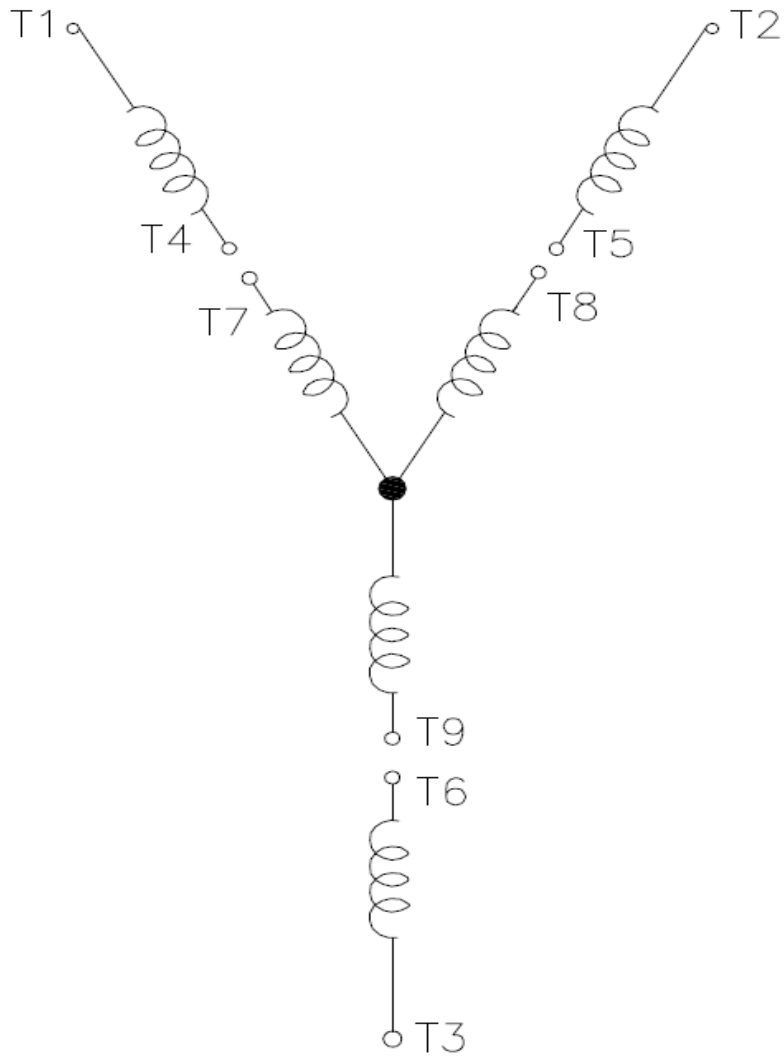
| Rev. | Summary of changes | Performed | Checked | Date |
|--------------|--------------------|----------------|---------|---------------------------|
| | | | | |
| Performed by | mrsanchez | 181374/2016-A1 | | Page Revision 1/1 1 |
| Checked by | mmoctezuma | | | |
| Date | 21/02/2018 | | | |

Wiring Diagram

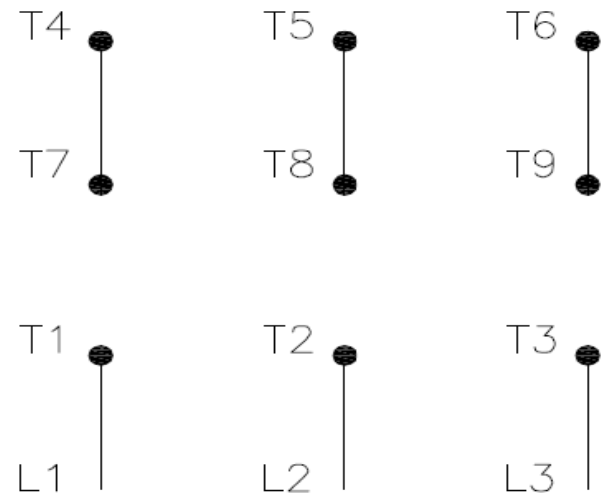


31LH65A

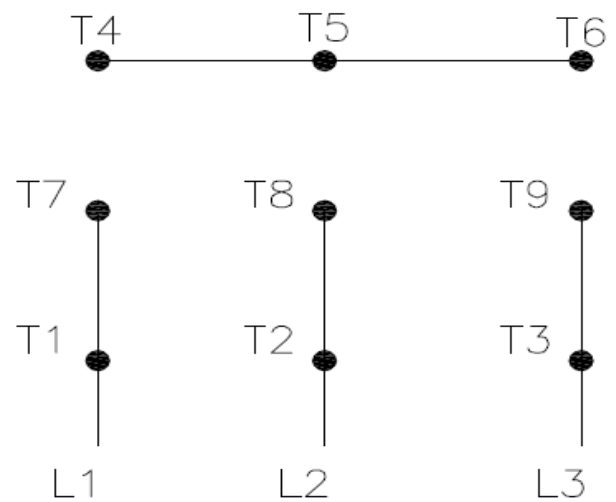
REV.
0



High Voltage (Y)



Low Voltage (YY)



- T1 — Blue
- T2 — White
- T3 — Orange
- T4 — Yellow
- T5 — Black
- T6 — Gray
- T7 — Pink
- T8 — Red
- T9 — Brick Red

Interchange any two line wires to reverse rotation.

| | | |
|-------------|-------------|------|
| DRAWING NO. | PAGE 1 of 1 | REV. |
| 31LH65A | | 0 |

Dayton Electric Mfg. Co. Lake Forest, IL 60045 USA

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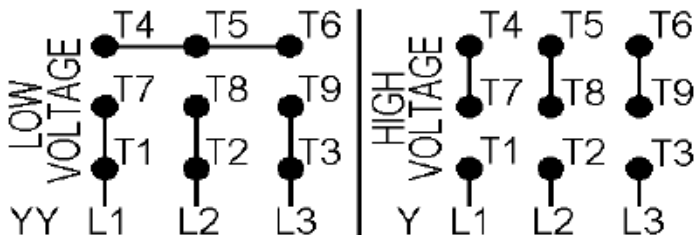
MADE IN MEXICO

NEMA®
PremiumMODEL NO. **C****UL**® US**CE****CSA**®
C US
Energy Verified**31LH65A**

TO0IC0X0X0000101334

MAT: 13800059

| | |
|----------------------|--------------------------|
| PH 3 | HP (kW) 1.0(0.75) |
| HZ 60 | V 230/460 |
| RPM 3470 | A 3.02/1.51 |
| FR 56C | DES B |
| IP 21 | ENCL ODP |
| AMB 40 °C | CODE J |
| SF 1.25 | INS F ΔT 80 K |
| SFA 3.7/1.8 A | PF 0.81 |
| DUTY CONT | |
| AVG. F.L. EFF. | 77.0% |



T1-BLU T2-WHT T3-ORG T4-YEL T5-BLK
T6-GRY T7-PNK T8-RED T9-BRK RED

INTERCHANGE ANY TWO LINE WIRES TO REVERSE ROTATION

ALT. RATING: 190-220/380-415V 50Hz
1.0HP 3.50-3.30/1.75-1.75 A 2810 RPM S.F.1.15

S/N:

Mfd. for Dayton Electric Mfg. Co., Lake Forest, IL 60045 USA