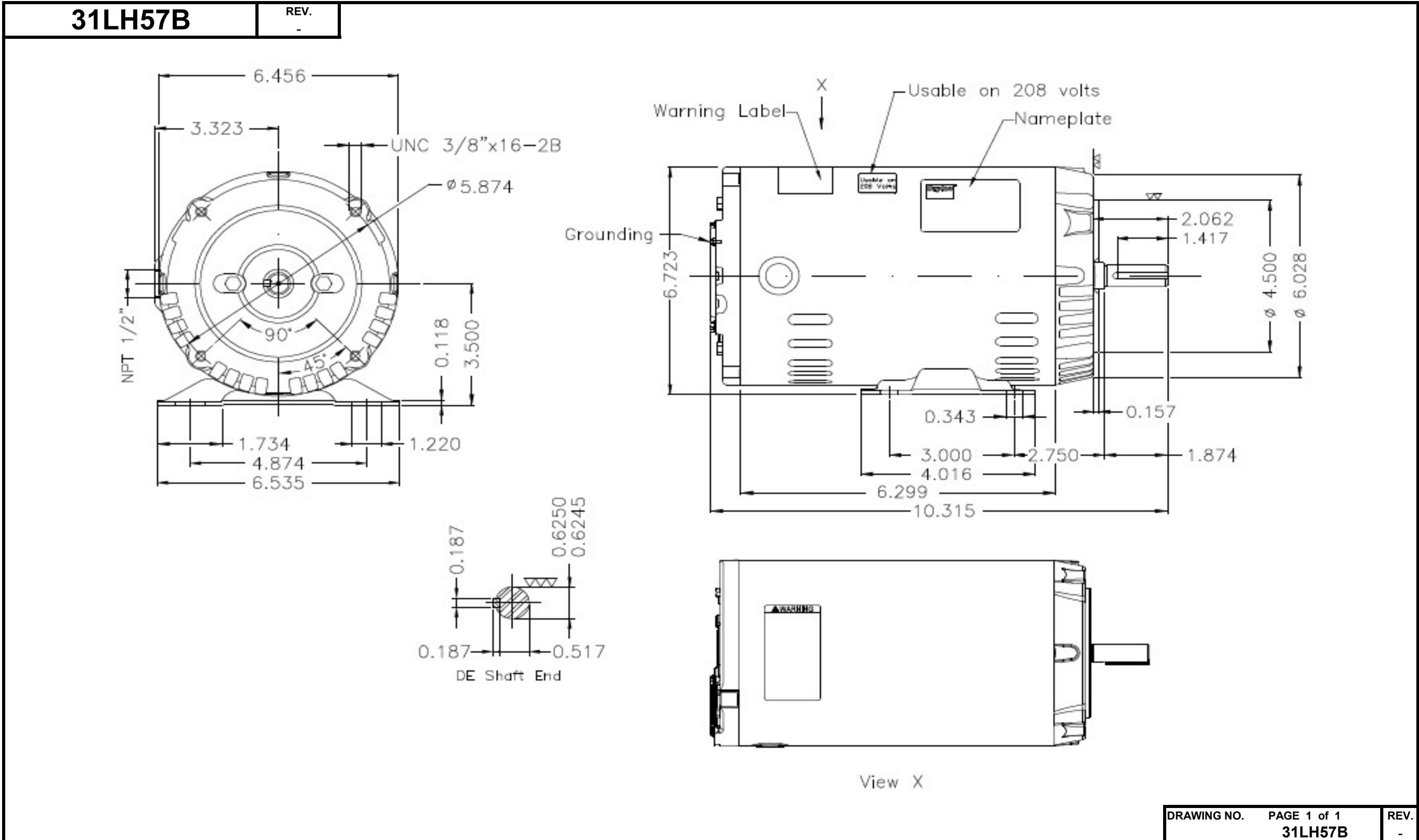


Dimensional Drawing



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

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer

Customer reference :

Product line : W01 - ODP - Premium Efficiency

Frame	: 56C	Locked rotor time	: 36 s (hot) 65 s (cold)
Output	: 0.33 HP (0.25 kW)	Temperature rise ⁴	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20 °C to +40 °C
Rated voltage	: 208-230/460 V	Altitude	: 1000 m.a.s.l
Rated current	: 1.48-1.34/0.668 A	Cooling method	: IC01 - ODP
L. R. Amperes	: 8.28/4.14 A	Mounting	: F-1
LRC (p.u.)	: 6.2 Code M	Direct of rotation ¹	: Both
No load current	: 1.10/0.550 A	Noise level ²	: 52.0 dB(A)
Rated speed	: 1765 rpm	Starting method	: Direct On Line
Slip	: 1.94 %	Weight ³	: 17.4 lb
Rated torque	: 0.982 ft.lb	Design	: B
Locked rotor torque	: 230 %		
Pull up torque	: 195 %		
Breakdown torque	: 330 %		
Insulation class	: F		
Service factor	: 1.35 (1.00 at 208V)		
Moment of inertia (J)	: 0.0451 sq.ft.lb		

Output	Start	50%	75%	100%	Load type	: -
Efficiency (%)	-	62.0	70.0	73.4	Load torque	: 0.982 ft.lb
Power factor	0.70	0.44	0.55	0.64	Load inertia (J=GD ² /4)	: 0.0451 sq.ft.lb

	Drive end	Non drive end	Foundation loads	
Bearing type	6203-ZZ	6202-ZZ	Maximum traction	: 26 lb
Lubrication interval	-	-	Maximum compression	: 43 lb
Lubricant amount	-	-		
Lubricant type	MOBIL POLYREX EM			

Notes:
 Dayton # 31LH57B
 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	marian			181459/2016-A	
Checked by	esalazar			Page	Revision
Date	31/10/2016			1/2	0

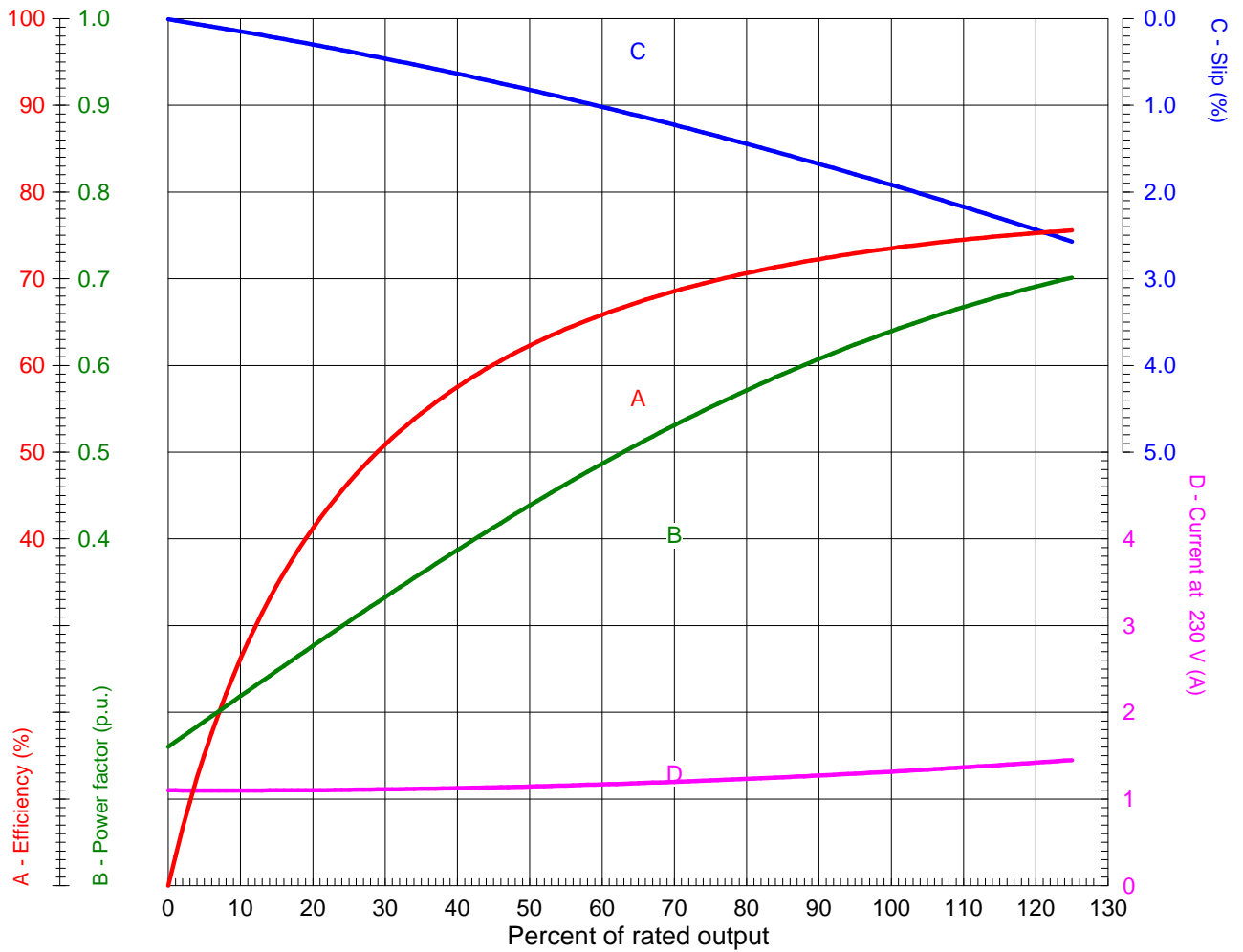
LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer
Customer reference :

Product line : W01 - ODP - Premium Efficiency



Performance : 0.33 HP (0.25 kW) 208-230/460 V 60 Hz 4P 56C

Rated current	: 1.48-1.34/0.668 A	Moment of inertia (J)	: 0.0451 sq.ft.lb
LRC (p.u.)	: 6.2 Code M	Duty cycle	: Cont.(S1)
Rated torque	: 0.982 ft.lb	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.35 (1.00 at 208V)
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Rev.	Summary of changes		Performed	Checked	Date
Performed by	marian			181459/2016-A1	
Checked by	esalazar			Page	Revision
Date	31/10/2016			1/1	0

TORQUE AND CURRENT X SPEED CURVE

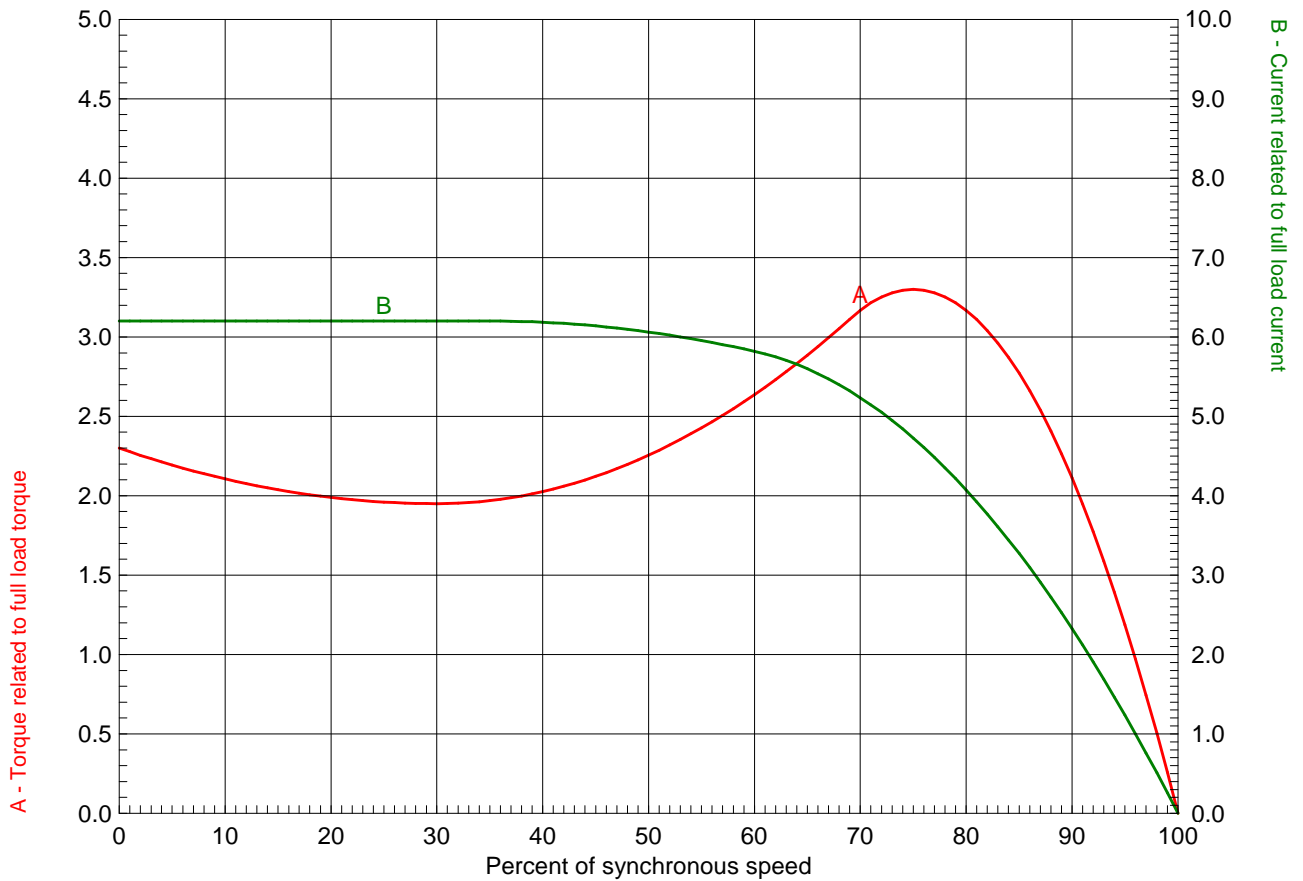


Three Phase Induction Motor - Squirrel Cage

Customer

Customer reference :

Product line : W01 - ODP - Premium Efficiency



Performance : 0.33 HP (0.25 kW) 208-230/460 V 60 Hz 4P 56C

Rated current	: 1.48-1.34/0.668 A	Moment of inertia (J)	: 0.0451 sq.ft.lb
LRC (p.u.)	: 6.2 Code M	Duty cycle	: Cont.(S1)
Rated torque	: 0.982 ft.lb	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.35 (1.00 at 208V)
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time 100% : 36 s (hot) 65 s (cold)
 Load inertia (J=GD²/4) : 0.0451 sq.ft.lb

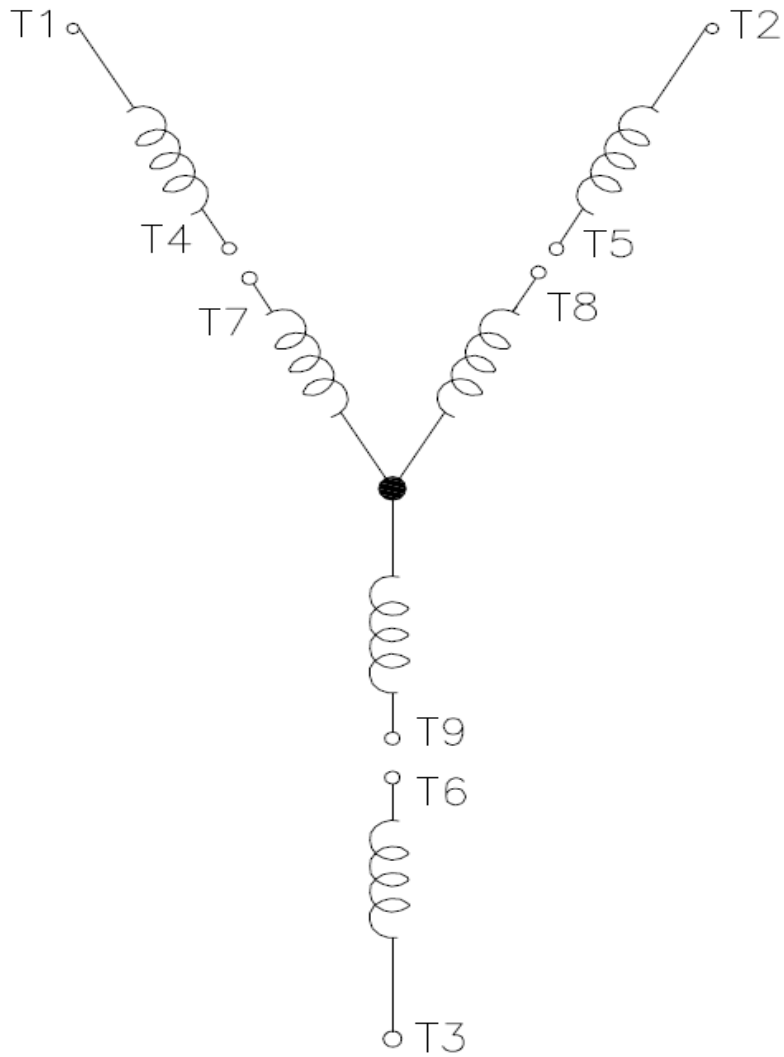
Rev.	Summary of changes		Performed	Checked	Date
Performed by	marian			181459/2016-A1	
Checked by	esalazar			Page	Revision
Date	31/10/2016			1/1	0

Wiring Diagram

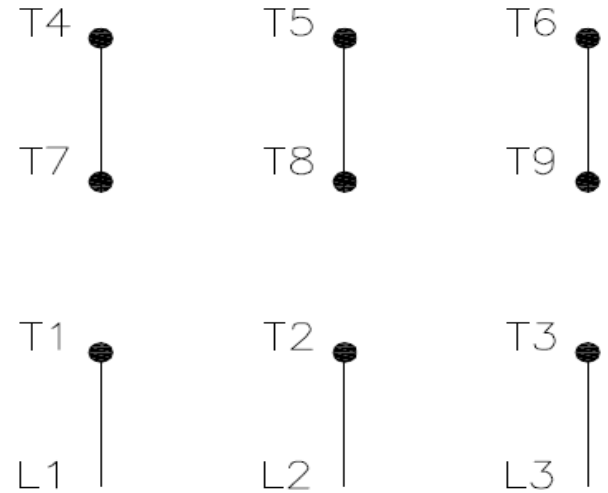


31LH57B

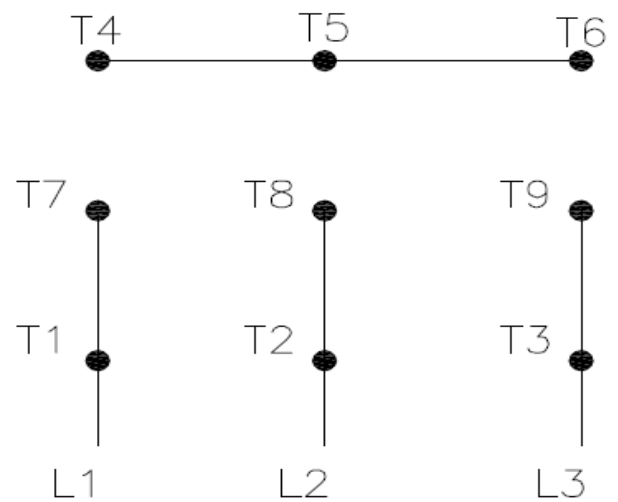
REV.
0



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.
31LH57B		0

27JUL18

Dayton

MADE IN MEXICO

NEMA
Premium

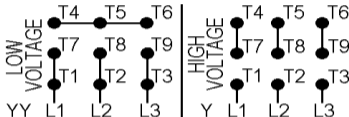
MODEL NO.

UL US**CE****SP** US
Energy Verified**31LH57B**

TO0IC0X0X0000300227

MAT: 13800052

PH **3** HP (kW) **0.33(0.25)**
 HZ **60** V **230/460**
 RPM **1765** A **1.34/0.66**
 FR **56C** DES **B**
IP21 ENCL **ODP**
 AMB **40 °C** CODE **M**
 SF **1.35** INS **F** ΔT **80 K**
 SFA **1.8/0.9 A** PF **0.64**
 DUTY **CONT**
 AVG. F.L. EFF. **73.4%**



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
0.33HP 1.44-1.40/0.71-0.74 A 1450 RPM S.F. 1.35

S/N:

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