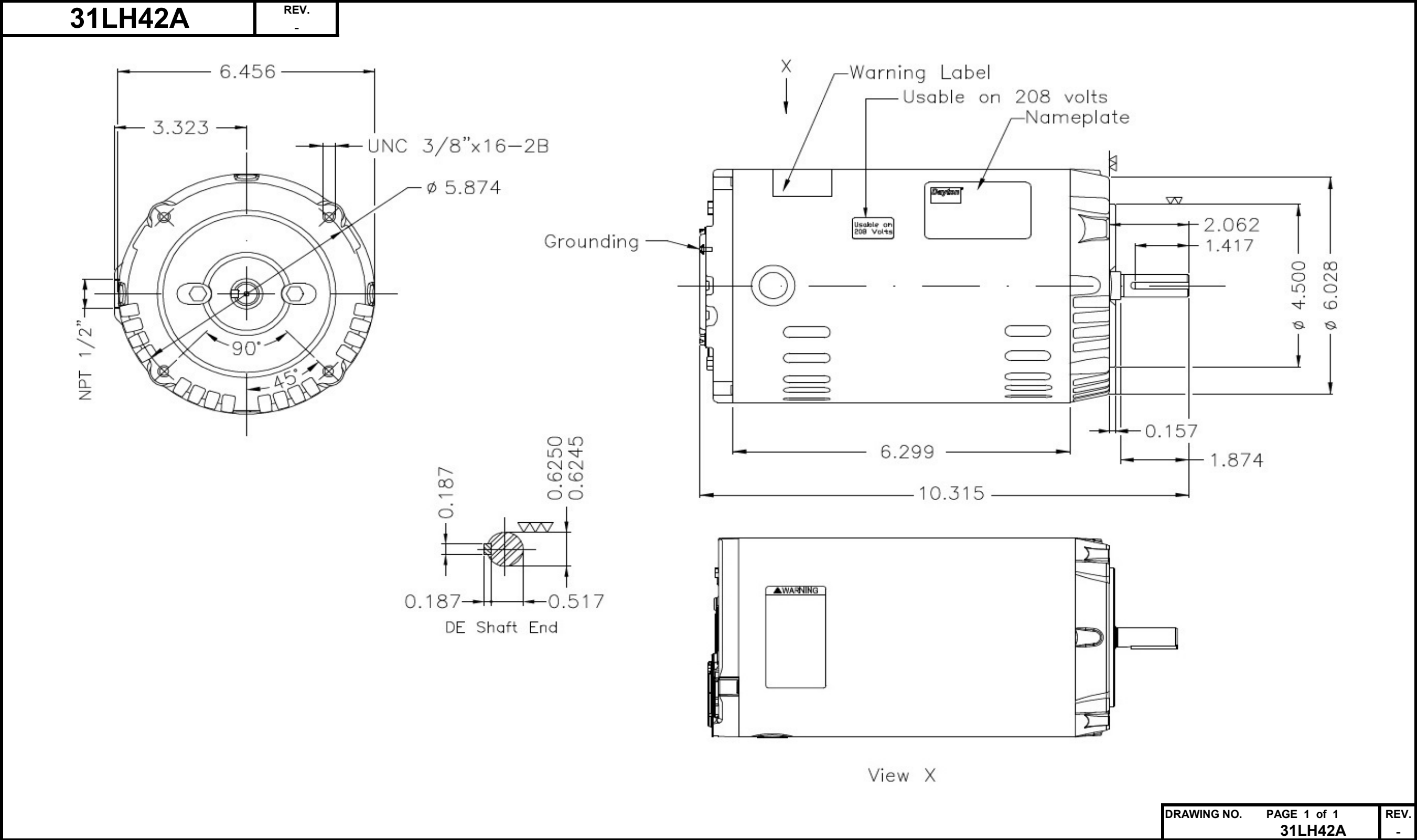


Dimensional Drawing



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

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : W01 - ODP - Premium Efficiency

Frame	: 56C	Locked rotor time	: 39 s (hot) 70 s (cold)
Output	: 0.5 HP (0.37 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	: 1.62/0.811 A	Cooling method	: IC01 - ODP
L. R. Amperes	: 10.1/5.03 A	Mounting	: F-1
LRC (p.u.)	: 6.2 Code K	Direct of rotation ¹	: Both
No load current	: 1.10/0.550 A	Noise level ²	: 62.0 dB(A)
Rated speed	: 3490 rpm	Vibration class	: A
Slip	: 3.06 %	Starting method	: Direct On Line
Rated torque	: 0.104 kgfm	Coupling	: Direct
Locked rotor torque	: 230 %	Approx. weight ³	: 7.5 kg
Pull up torque	: 195 %	Painting plan	: 207N
Breakdown torque	: 280 %	Color	: RAL 7021
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0016 kgm ²		

Output	Start	50%	75%	100%	Load type: -
Efficiency (%)	-	64.0	70.0	73.4	Load torque: -
Power factor	0.72	0.57	0.69	0.78	Load inertia (J=GD ² /4): -

	Drive end	Non drive end	Foundation loads	
Bearing type	6203-ZZ	6202-ZZ	Maximum traction	: 7 kgf
Lubrication interval	-	-	Maximum compression	: 14 kgf
Lubricant amount	-	-		
Lubricant type	MOBIL POLYREX EM			

Notes:
 * Dayton # 31LH42A
 * 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			177738/2016-A
Checked by	mmoctezuma			Page Revision
Date	21/02/2018			1/2 1

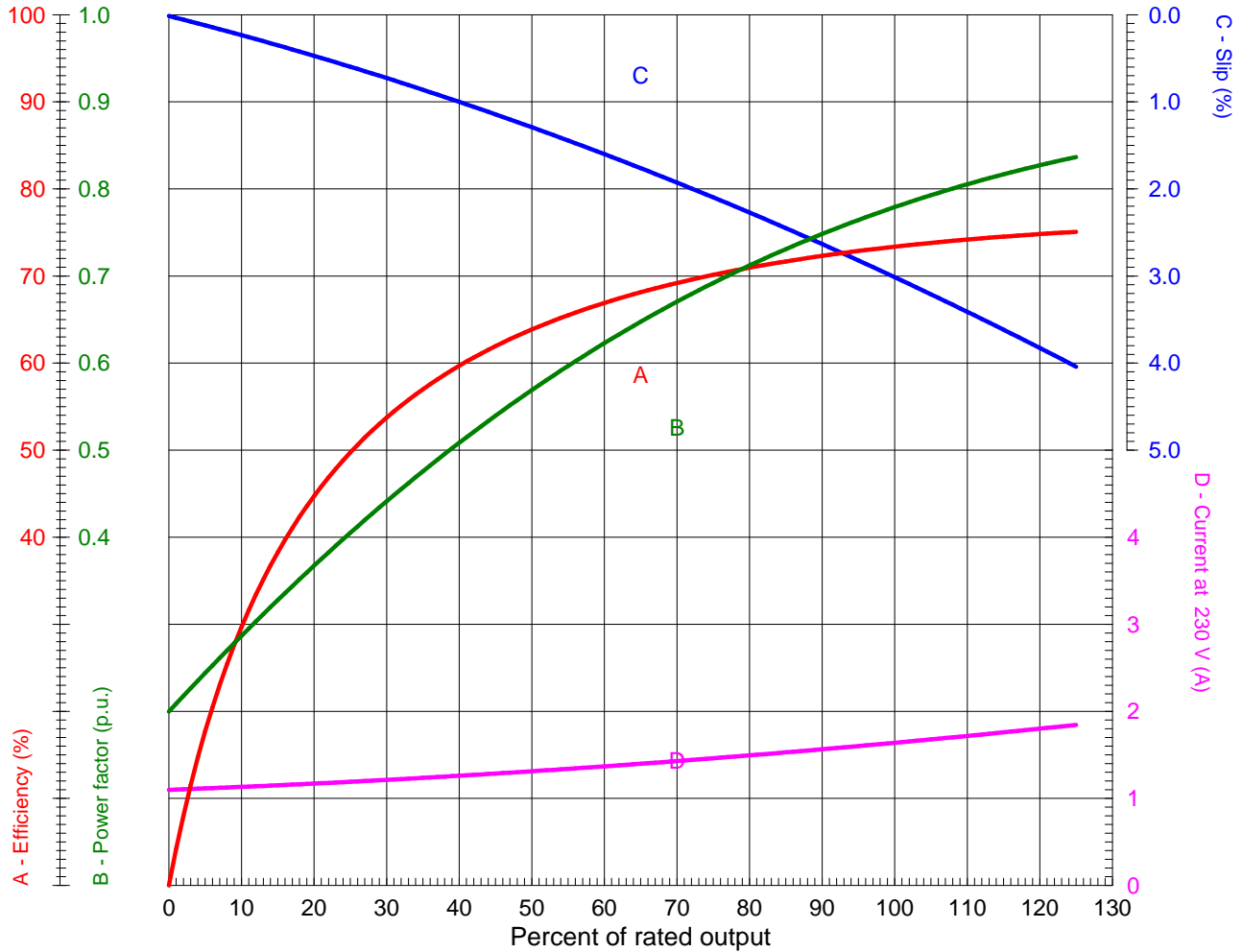
LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : W01 - ODP - Premium Efficiency



Performance : 0.5 HP (0.37 kW) 230/460 V 60 Hz 2P 56C

Rated current	: 1.62/0.811 A	Moment of inertia (J)	: 0.0016 kgm ²
LRC (p.u.)	: 6.2 Code K	Duty cycle	: Cont.(S1)
Rated torque	: 0.104 kgfm	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3490 rpm		

Rev.	Summary of changes		Performed	Checked	Date
Performed by	mrsanchez		177738/2016-A1		
Checked by	mmoctezuma		Page	Revision	
Date	21/02/2018		1/1	1	

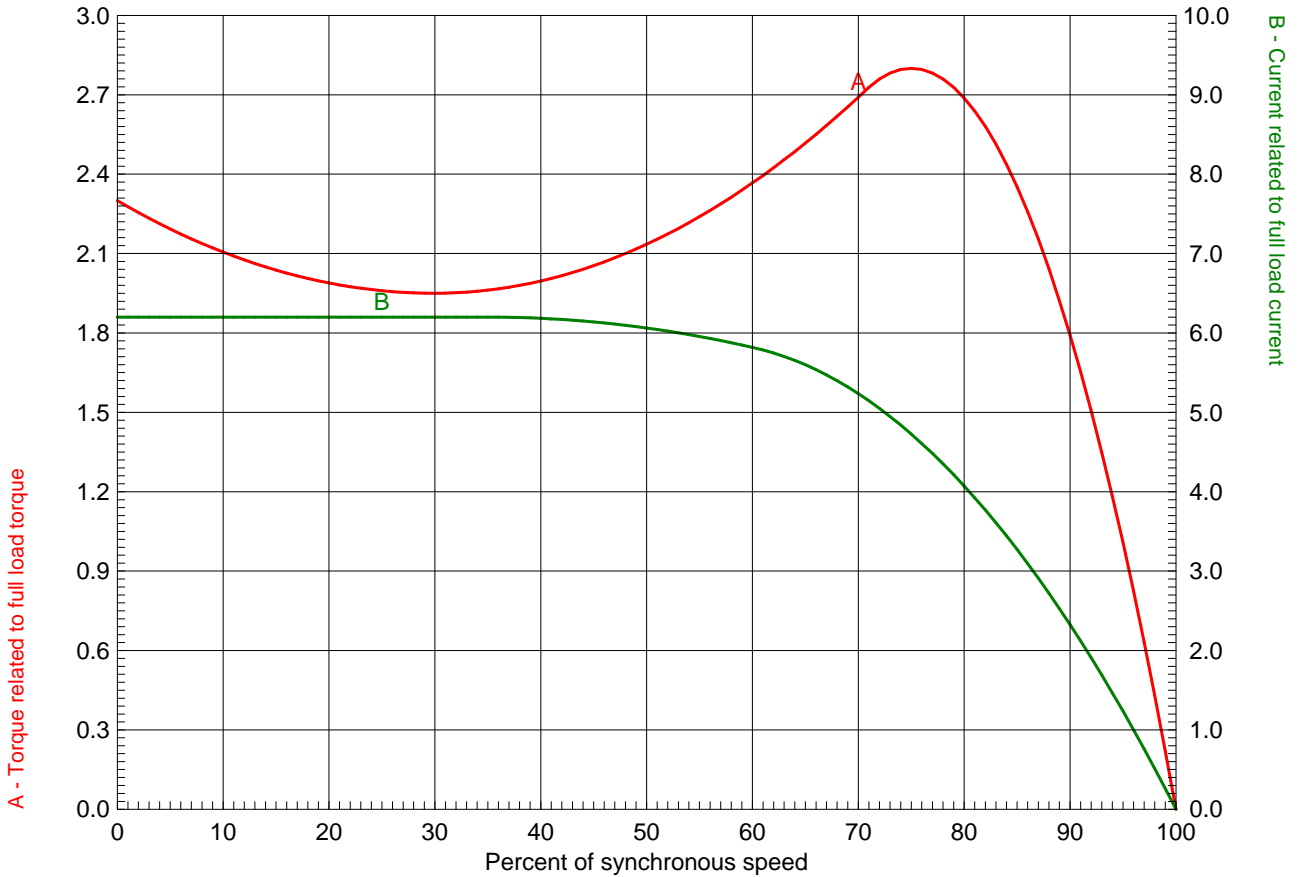
TORQUE AND CURRENT X SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : W01 - ODP - Premium Efficiency



Performance : 0.5 HP (0.37 kW) 230/460 V 60 Hz 2P 56C

Rated current : 1.62/0.811 A	Moment of inertia (J) : 0.0016 kgm ²
LRC (p.u.) : 6.2 Code K	Duty cycle : Cont.(S1)
Rated torque : 0.104 kgfm	Insulation class : F
Locked rotor torque : 230 %	Service factor : 1.25
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 3490 rpm	

Locked rotor time 100% : 39 s (hot) 70 s (cold)
 Load inertia (J=GD²/4) : 0.0016 kgm²

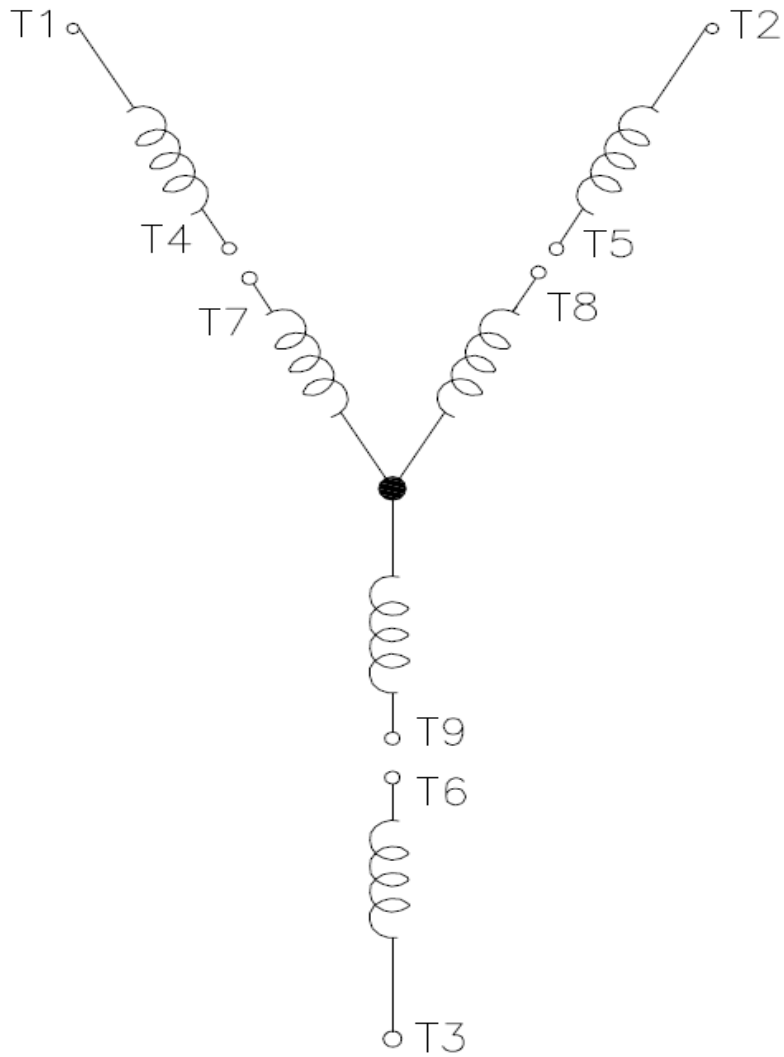
Rev.	Summary of changes	Performed	Checked	Date	
Performed by	mrsanchez	177738/2016-A1		Page 1/1	
Checked by	mmoctezuma				Revision 1
Date	21/02/2018				

Wiring Diagram

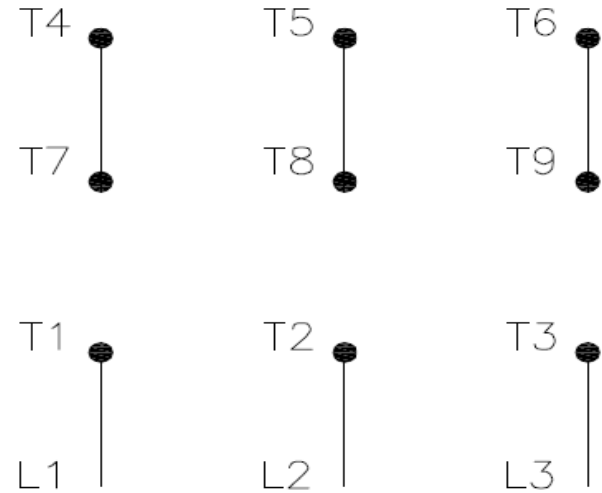


31LH42A

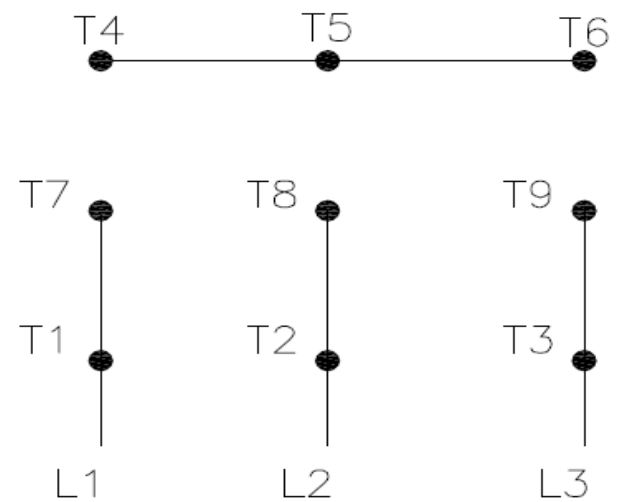
REV.
0



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.
31LH42A		0

20MAR18

Dayton®

MADE IN MEXICO

NEMA
Premium®

MODEL NO.

CEC® **US****CE****SA**®
C **US****31LH42A**

TO0IC0X0X0000100355

MAT: 13800088

PH 3 HP (kW) **0.5(0.37)**
 HZ **60** V **230/460**
 RPM **3490** A **1.62/0.81**
 FR **56C** DES **B**
 IP **21** ENCL **ODP**
 AMB **40 °C** CODE **K**
 SF **1.25** INS **F ΔT 80 K**
 SFA **2.0/1.0 A** PF **0.78**
 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
0.5HP 1.85-1.76/0.92-0.93 A 2845 RPM S.F. 1.25

S/N:

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