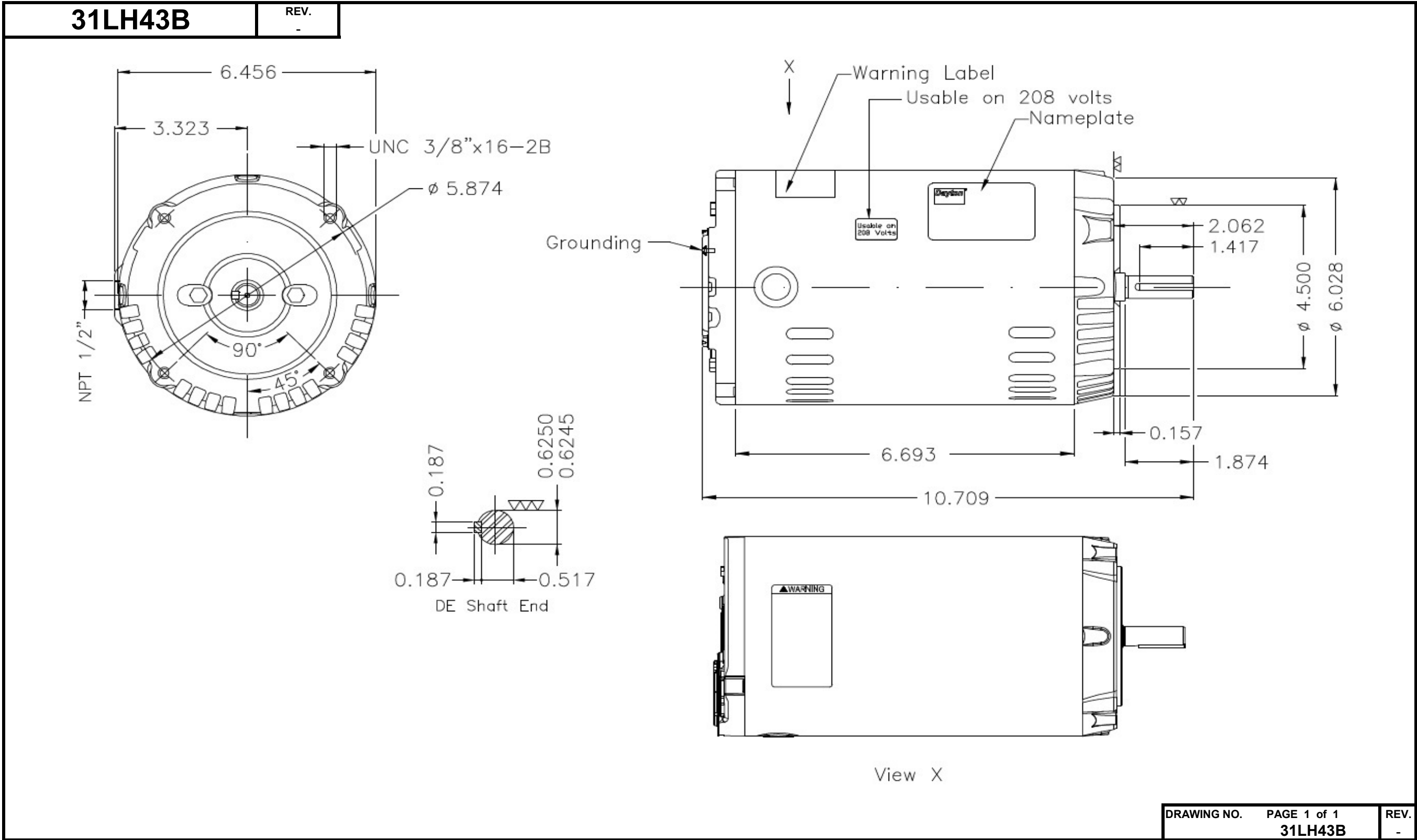


Dimensional Drawing



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	: 27 s (hot) 49 s (cold)
Output	: 0.5 HP (0.37 kW)	Temperature rise ⁴	: 80 K
Poles	: 4	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	: 1.72/0.861 A	Cooling method	: IC01 - ODP
L. R. Amperes	: 12.4/6.20 A	Mounting	: F-1
LRC (p.u.)	: 7.2 Code L	Direct of rotation ¹	: Both
No load current	: 1.30/0.650 A	Noise level ²	: 52.0 dB(A)
Rated speed	: 1765 rpm	Vibration class	: A
Slip	: 1.94 %	Starting method	: Direct On Line
Rated torque	: 0.206 kgfm	Coupling	: Direct
Locked rotor torque	: 240 %	Approx. weight ³	: 9.2 kg
Pull up torque	: 200 %	Painting plan	: 207N
Breakdown torque	: 330 %	Color	: RAL 7021
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0025 kgm ²		

Output	Start	50%	75%	100%	Load type: -
Efficiency (%)	-	70.0	75.5	78.2	Load torque: -
Power factor	0.70	0.47	0.60	0.69	Load inertia (J=GD ² /4): -

	Drive end	Non drive end	Foundation loads	
Bearing type	6203-ZZ	6202-ZZ	Maximum traction	: 21 kgf
Lubrication interval	-	-	Maximum compression	: 30 kgf
Lubricant amount	-	-		
Lubricant type	MOBIL POLYREX EM			

Notes:
 * Dayton # 31LH43B
 * 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			177764/2016-A
Checked by	mmoctezuma			Page Revision
Date	20/02/2018			1/2 2

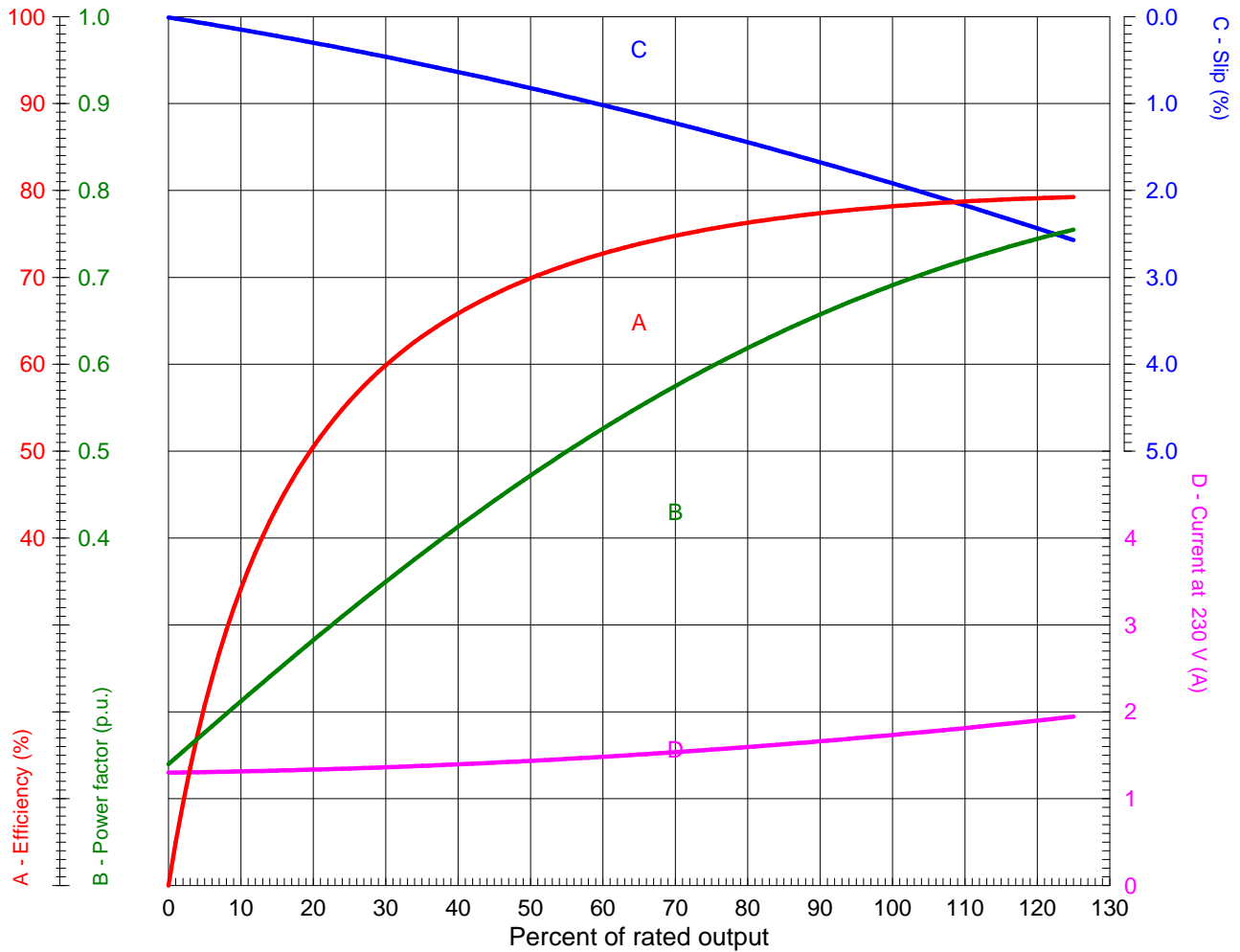
LOAD PERFORMANCE CURVE



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 4P 56C

Rated current : 1.72/0.861 A
 LRC (p.u.) : 7.2 Code L
 Rated torque : 0.206 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 330 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.0025 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K

Rev.	Summary of changes		Performed	Checked	Date
Performed by	mrsanchez		177764/2016-A1		
Checked by	mmoctezuma				
Date	20/02/2018				
			Page	Revision	
			1/1	2	

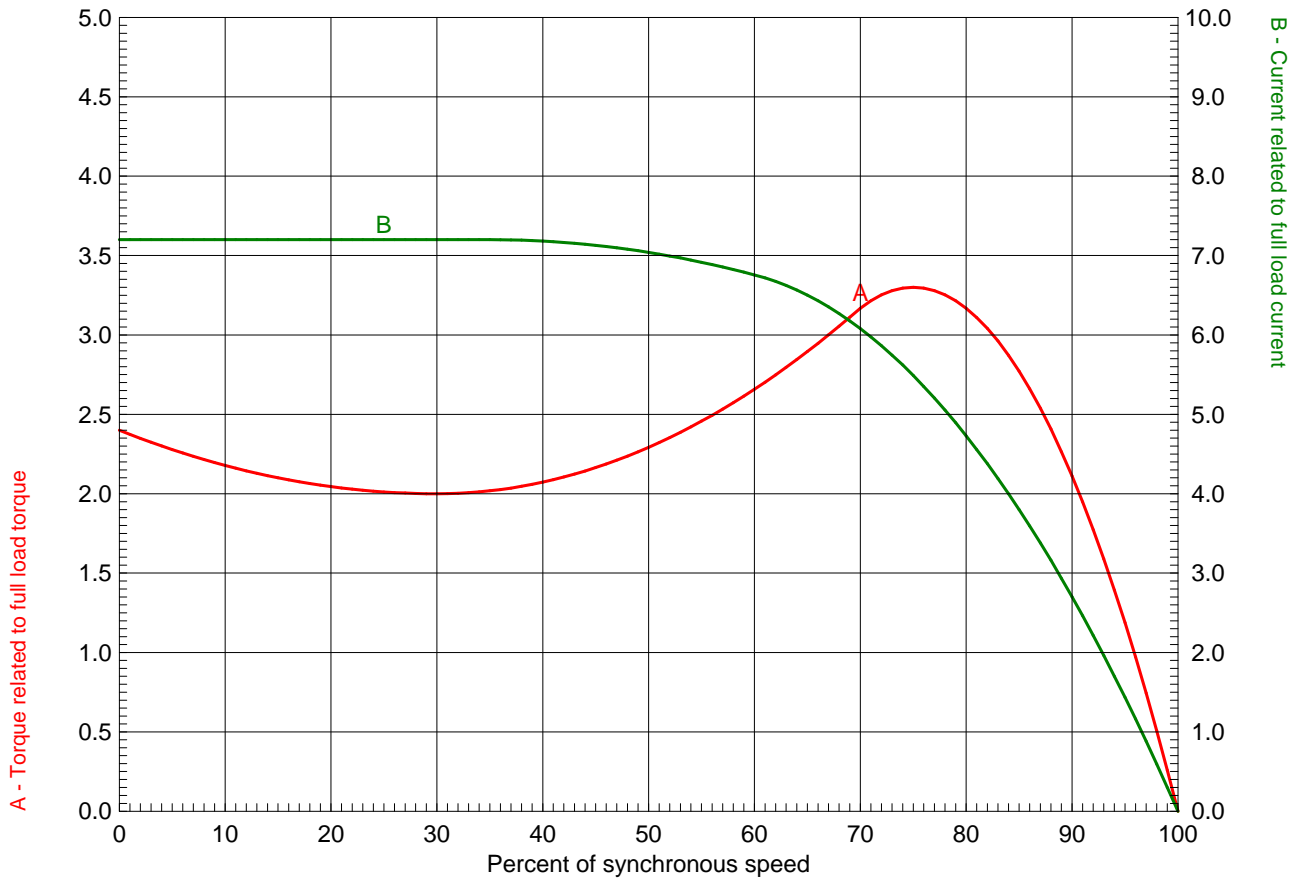
TORQUE AND CURRENT X SPEED CURVE



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 4P 56C

Rated current : 1.72/0.861 A	Moment of inertia (J) : 0.0025 kgm ²
LRC (p.u.) : 7.2 Code L	Duty cycle : Cont.(S1)
Rated torque : 0.206 kgfm	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.25
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 1765 rpm	

Locked rotor time 100% : 27 s (hot) 49 s (cold)
 Load inertia (J=GD²/4) : 0.0025 kgm²

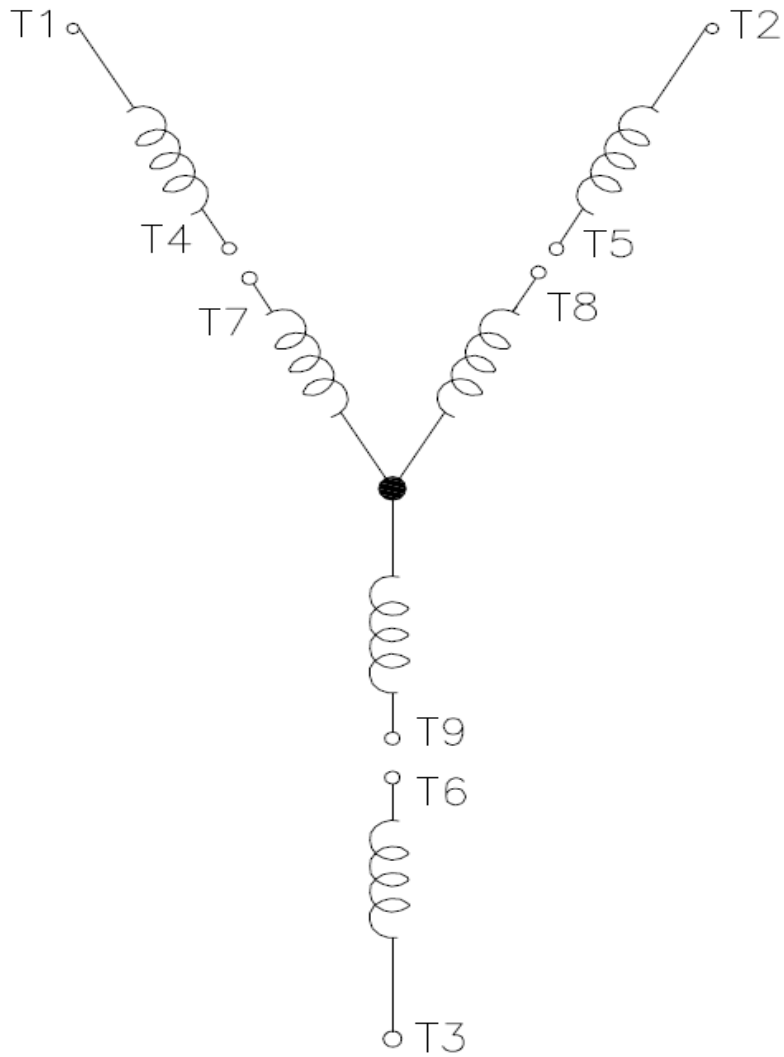
Rev.	Summary of changes	Performed	Checked	Date	
Performed by	mrsanchez	177764/2016-A1			
Checked by	mmoctezuma			Page	Revision
Date	20/02/2018			1/1	2

Wiring Diagram

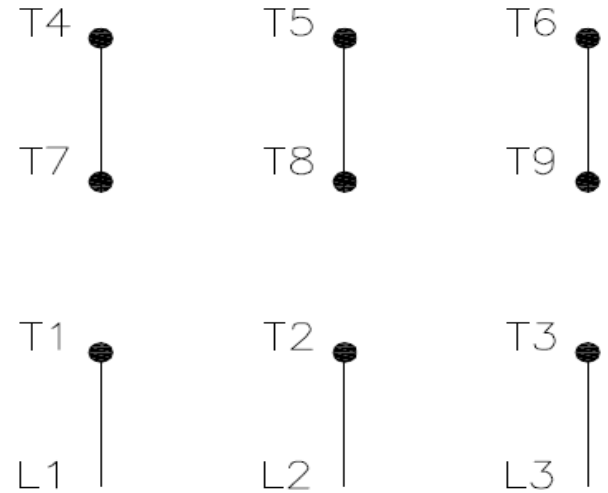


31LH43B

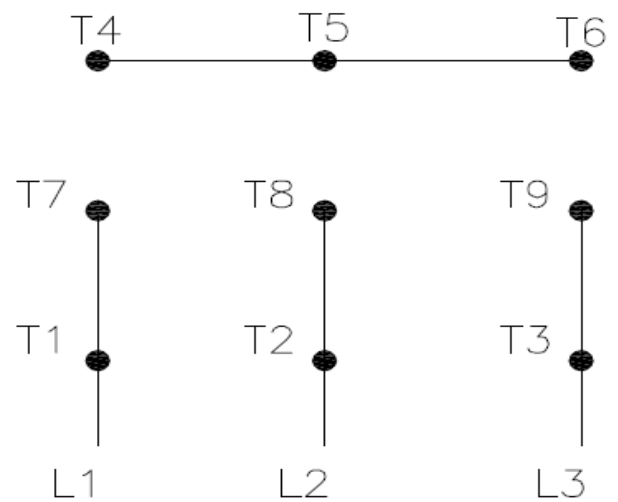
REV.
0



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.
31LH43B		0

20MAR18

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NEMA®
Premium

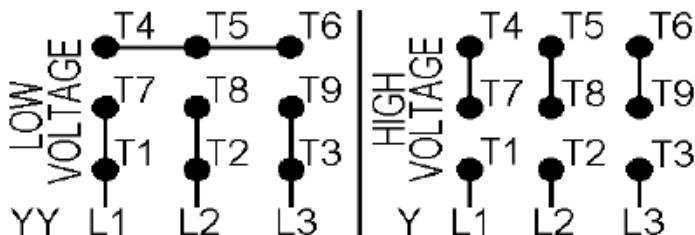
MODEL NO.

C **RU**® **US****CE** **CSA**®
C US**31LH43B**

T00IC0X0X0000300355

MAT: 13775708

PH 3 HP (kW) **0.5(0.37)**
 HZ **60** V **230/460**
 RPM **1765** A **1.72/0.86**
 FR **56C** DES **B**
 IP **21** ENCL **ODP**
 AMB **40 °C** CODE **L**
 SF **1.25** INS **F ΔT 80 K**
 SFA **2.1/1.0 A** PF **0.69**
 DUTY **CONT**
 AVG F.L. EFF. **78.2%**



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 1.89-1.81/0.94-0.95 A 1450 RPM S.F. 1.25

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