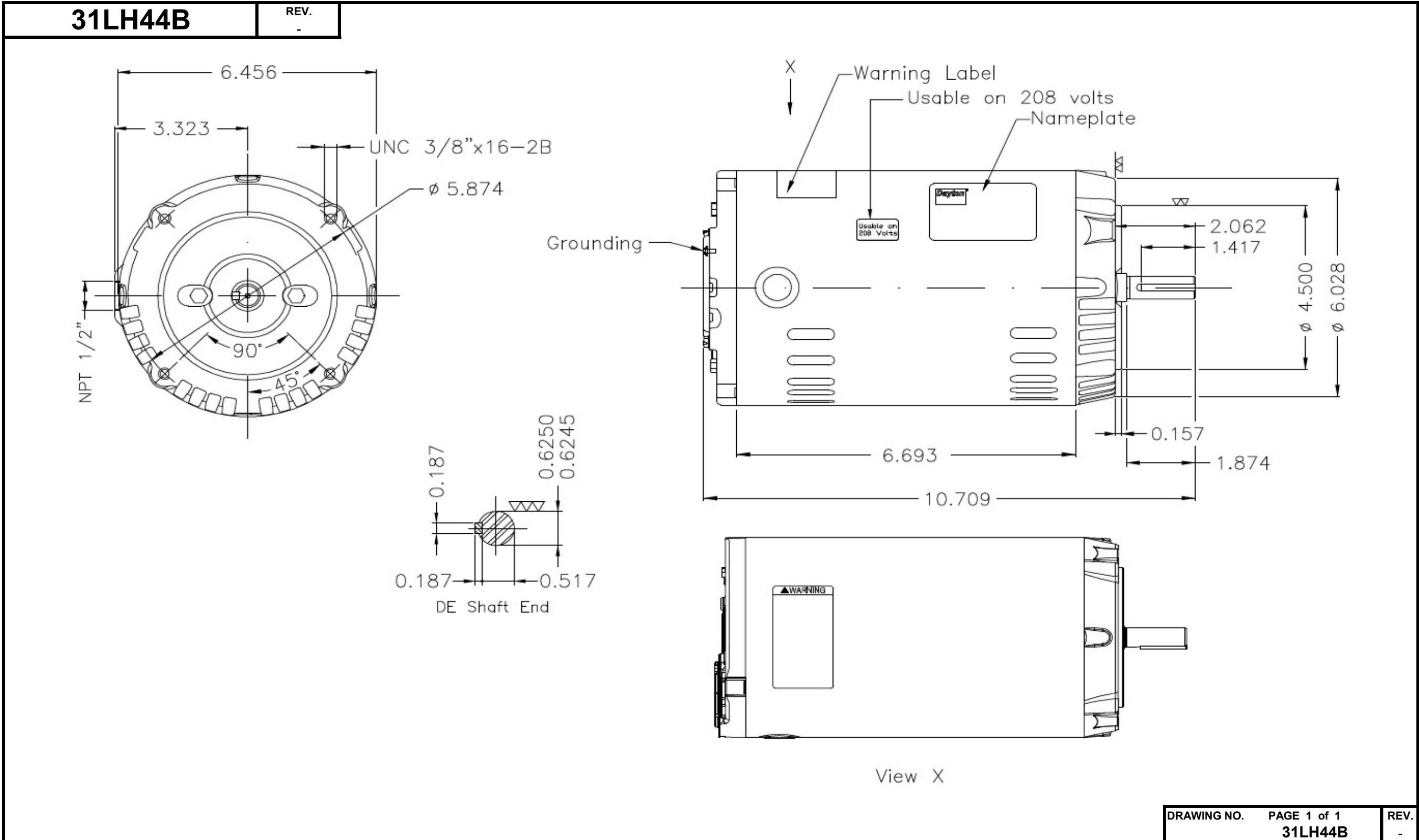


Dimensional Drawing



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

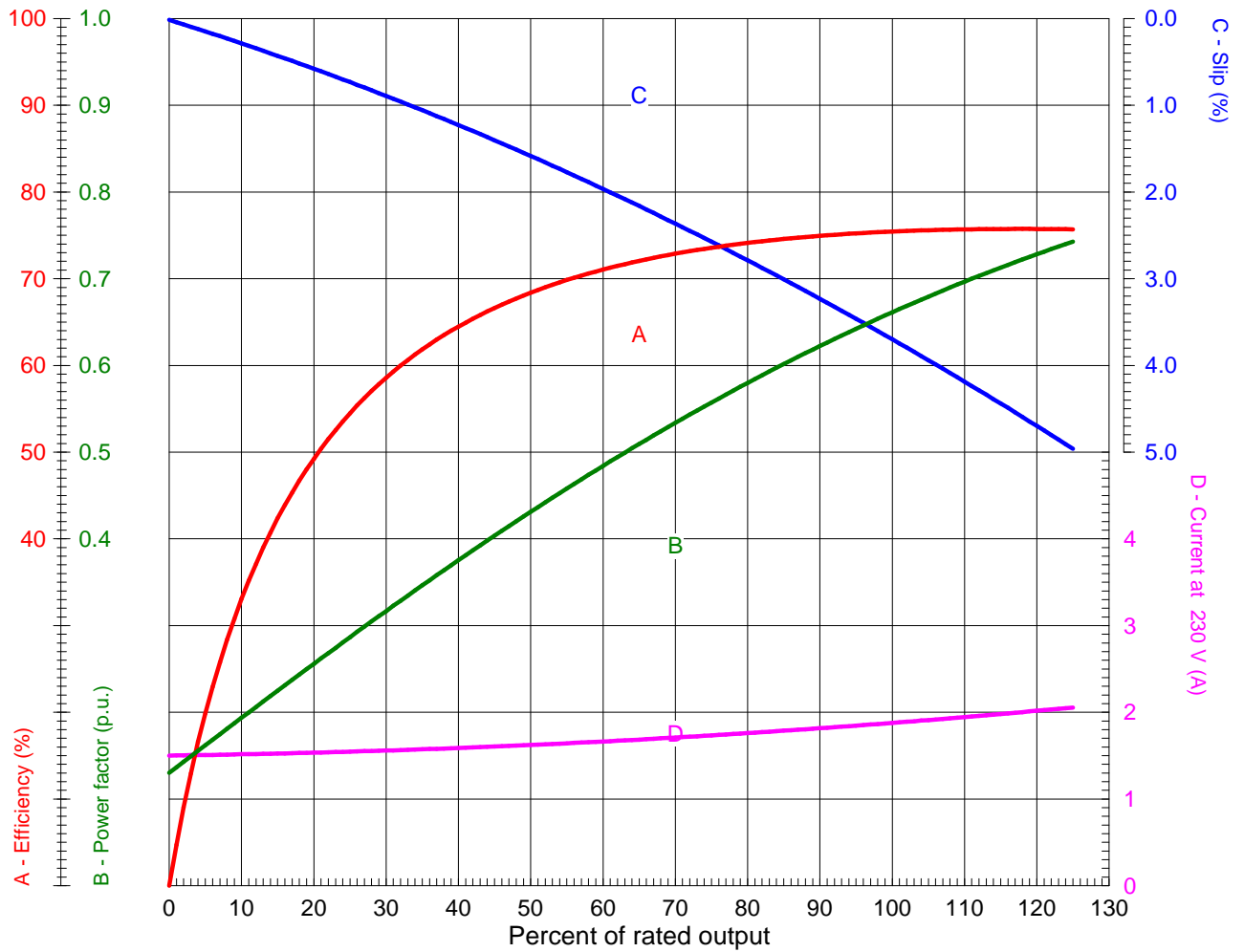
LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :
Customer reference :

Product line : W01 - ODP - Premium Efficiency



Performance : 0.5 HP (0.37 kW) 208-230/460 V 60 Hz 6P 56C

Rated current	: 2.06-1.87/0.934 A	Moment of inertia (J)	: 0.0878 sq.ft.lb
LRC (p.u.)	: 5.1 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 2.27 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25 (1.00 at 208V)
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1155 rpm	Design	: B

Rev.	Summary of changes		Performed	Checked	Date
Performed by	mrsanchez			177788/2016-A1	
Checked by	caltamirano			Page	Revision
Date	08/09/2016			1/1	0

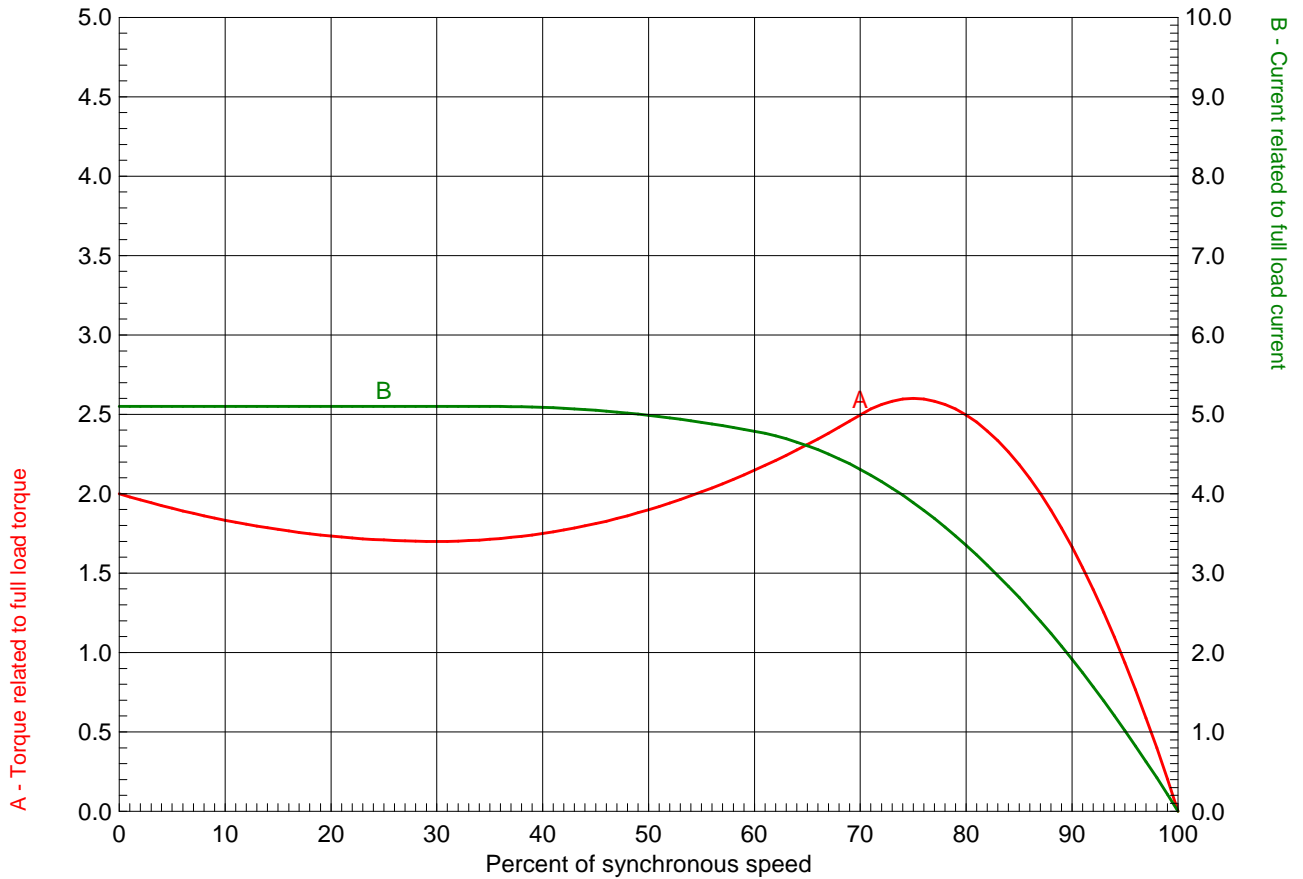
TORQUE AND CURRENT X SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :
Customer reference :

Product line : W01 - ODP - Premium Efficiency



Performance : 0.5 HP (0.37 kW) 208-230/460 V 60 Hz 6P 56C

Rated current : 2.06-1.87/0.934 A	Moment of inertia (J) : 0.0878 sq.ft.lb
LRC (p.u.) : 5.1 Code J	Duty cycle : Cont.(S1)
Rated torque : 2.27 ft.lb	Insulation class : F
Locked rotor torque : 200 %	Service factor : 1.25 (1.00 at 208V)
Breakdown torque : 260 %	Temperature rise : 80 K
Rated speed : 1155 rpm	Design : B

Locked rotor time 100% : 28 s (hot) 50 s (cold)
Load inertia (J=GD²/4) : 0.0878 sq.ft.lb

Rev.	Summary of changes	Performed	Checked	Date
Performed by	mrsanchez	177788/2016-A1		
Checked by	caltamirano	Page	Revision	
Date	08/09/2016	1/1	0	

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :
Customer reference :

Product line : W01 - ODP - Premium Efficiency

Frame	: 56C	Locked rotor time	: 28 s (hot) 50 s (cold)
Output	: 0.5 HP (0.37 kW)	Temperature rise ⁴	: 80 K
Poles	: 6	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	: 2.06-1.87/0.934 A	Cooling method	: IC01 - ODP
L. R. Amperes	: 9.53/4.76 A	Mounting	: F-1
LRC (p.u.)	: 5.1 Code J	Direct of rotation ¹	: Both
No load current	: 1.50/0.750 A	Noise level ²	: 50.0 dB(A)
Rated speed	: 1155 rpm	Vibration class	: A
Slip	: 3.75 %	Starting method	: Direct On Line
Rated torque	: 2.27 ft.lb	Coupling	: Direct
Locked rotor torque	: 200 %	Weight ³	: 21.2 lb
Pull up torque	: 170 %	Painting plan	: 207N
Breakdown torque	: 260 %	Color	: RAL 7021
Insulation class	: F	Design	: B
Service factor	: 1.25 (1.00 at 208V)		
Moment of inertia (J)	: 0.0878 sq.ft.lb		

Output	Start	50%	75%	100%	Load type	: -
Efficiency (%)	-	68.0	74.0	75.3	Load torque	: 2.27 ft.lb
Power factor	0.70	0.43	0.56	0.66	Load inertia (J=GD ² /4)	: 0.0878 sq.ft.lb

	Drive end	Non drive end	Foundation loads	
Bearing type	6203-ZZ	6202-ZZ	Maximum traction	: 54 lb
Lubrication interval	-	-	Maximum compression	: 75 lb
Lubricant amount	-	-		
Lubricant type	MOBIL POLYREX EM			

Notes:
Dayton # 31LH44B
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.

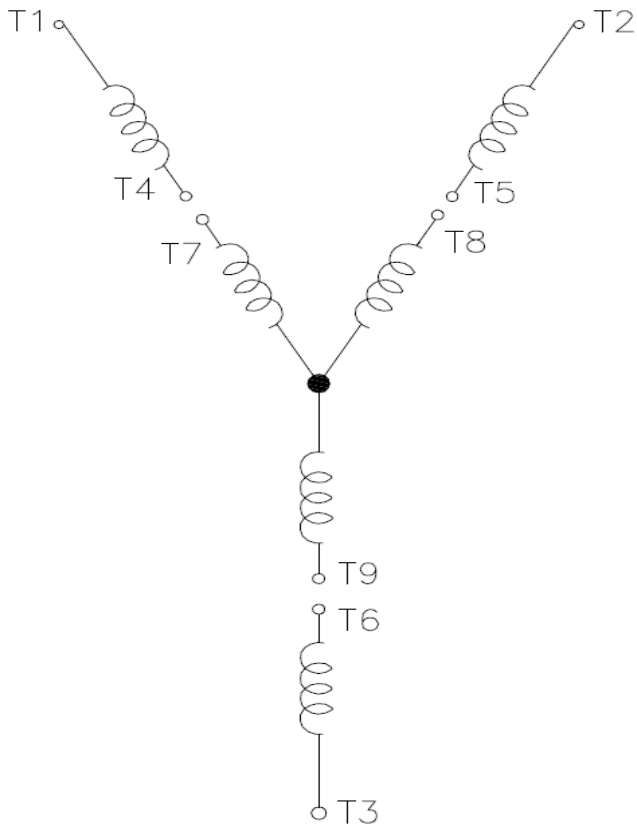
Rev.	Summary of changes	Performed	Checked	Date
Performed by	mrsanchez			177788/2016-A
Checked by	caltamirano			Page Revision
Date	08/09/2016			1/2 0

Wiring Diagram

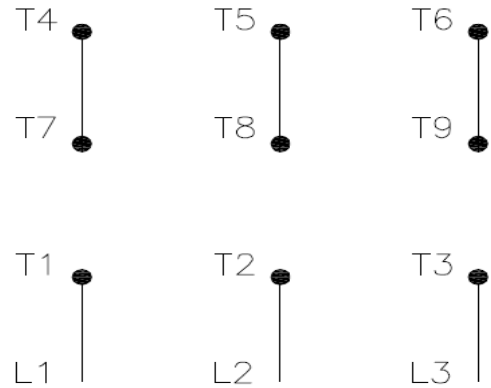


31LH44B

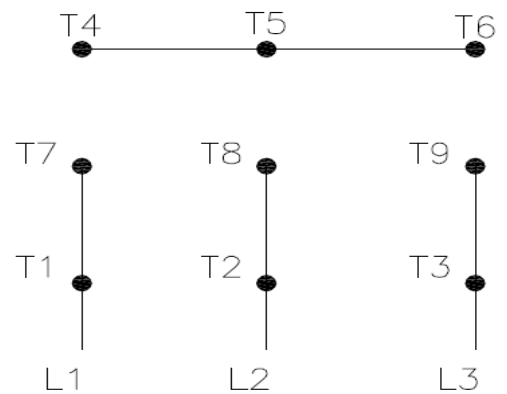
REV.
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High Voltage (Y)



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.
31LH44B 0

27 JUL 18

Dayton®

MADE IN MEXICO

NEMA
Premium®

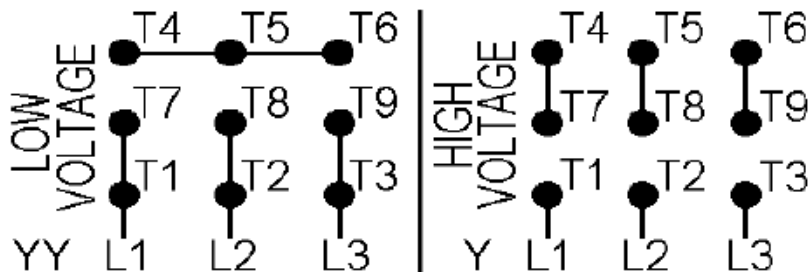
MODEL NO.

e **UL**® **us****CE****SP**®
us**31LH44B**

TO0IC0X0X0000900355

MAT: 13800089

PH **3** HP (kW) **0.5(0.37)**
 HZ **60** V **230/460**
 RPM **1155** A **1.87/0.93**
 FR **56C** DES **B**
 IP **21** ENCL **ODP**
 AMB **40 °C** CODE **J**
 SF **1.25** INS **F** ΔT **80 K**
 SFA **2.3/1.1 A** PF **0.66**
 DUTY **CONT**
 AVG F.L. EFF. **75.3%**



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 2.08-1.96/1.04-1.04 A 935 RPM S.F. 1.15

S/N:

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