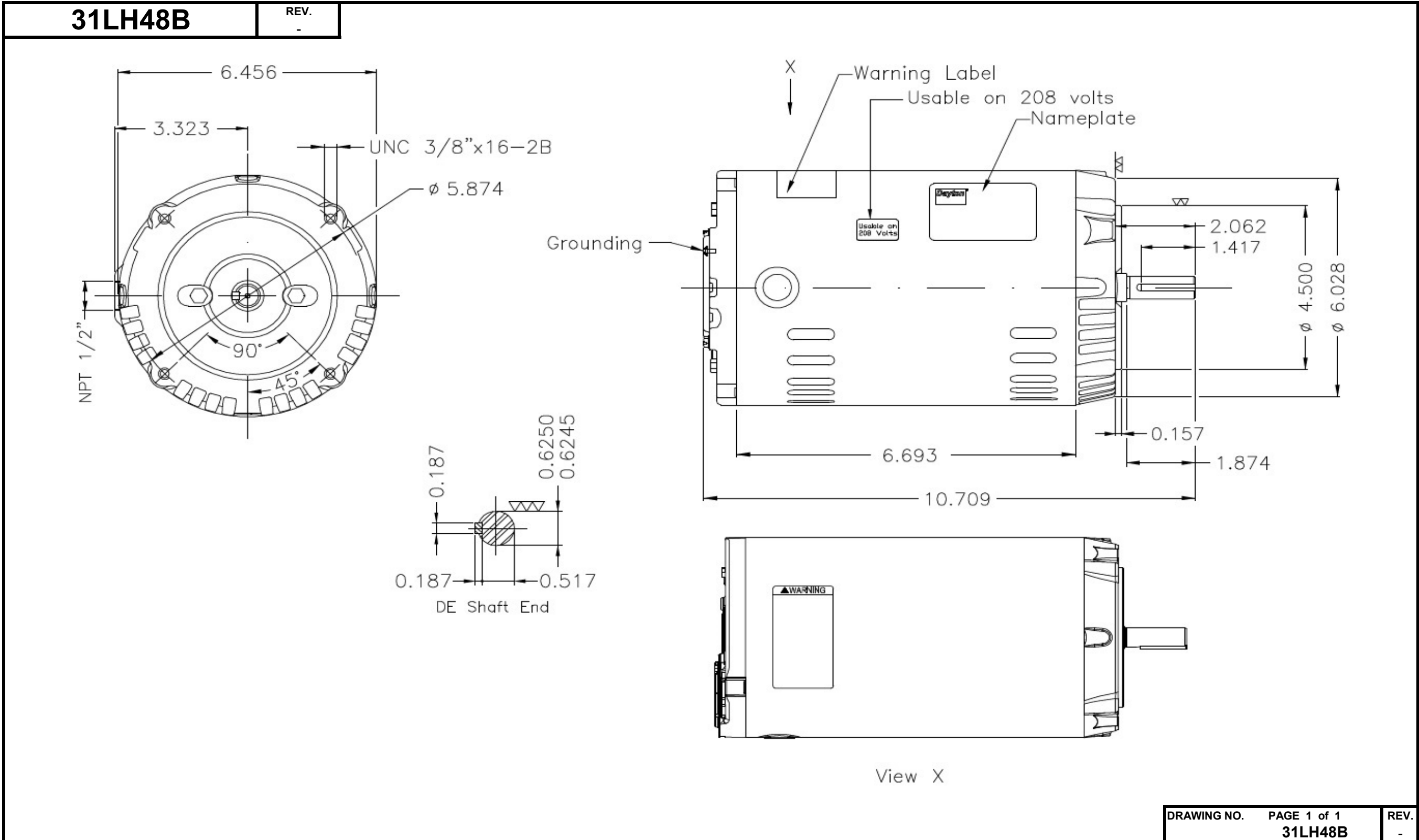


Dimensional Drawing



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	: 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	Vibration class	: A
Slip	: 3.61 %	Starting method	: Direct On Line
Rated torque	: 0.209 kgfm	Coupling	: Direct
Locked rotor torque	: 230 %	Approx. weight ³	: 8.9 kg
Pull up torque	: 195 %	Painting plan	: 207N
Breakdown torque	: 260 %	Color	: RAL 7021
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 # 31LH48B
 * 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			180457/2016-A
Checked by	mmoctezuma			Page Revision
Date	20/02/2018			1/2 2

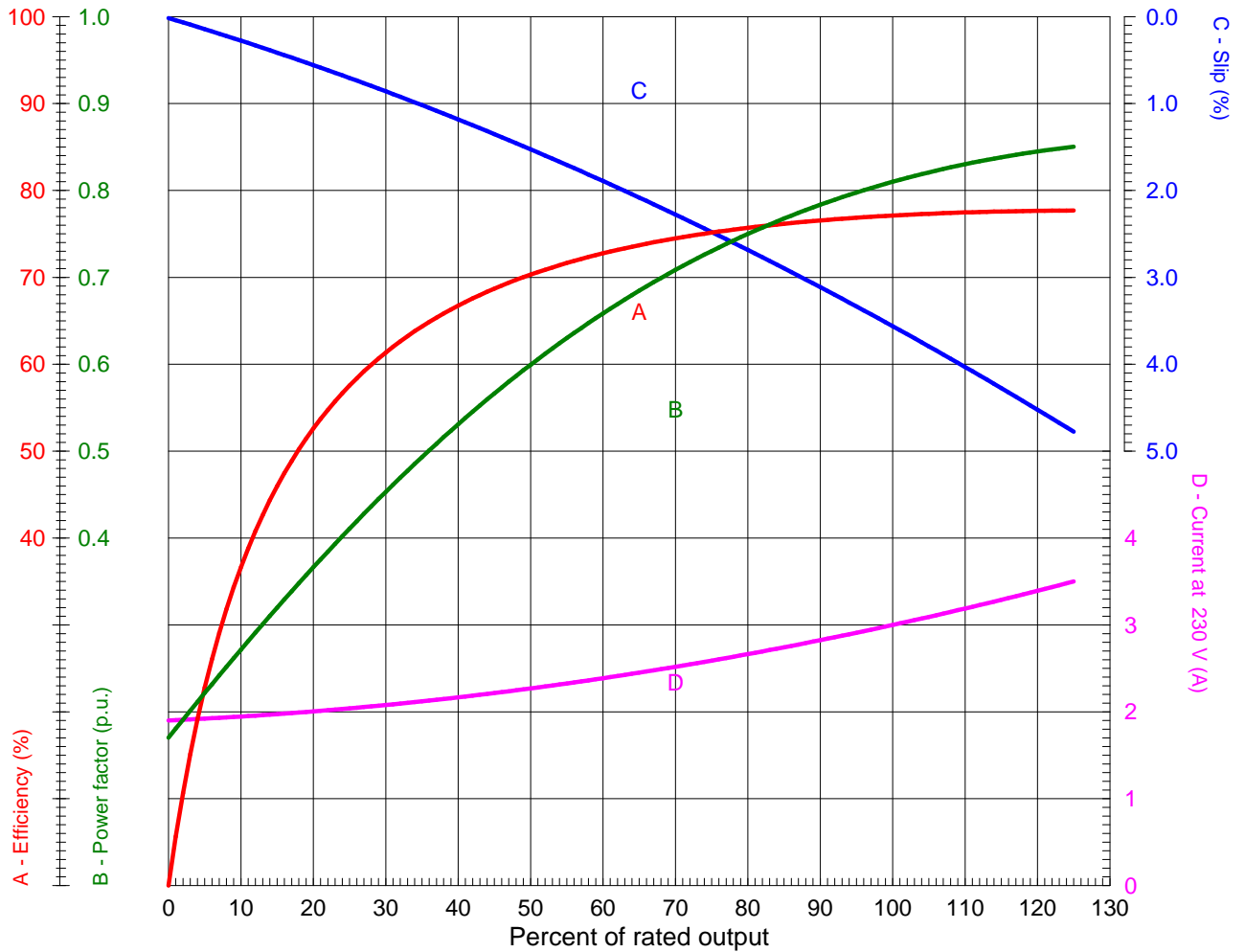
LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : W01 - ODP - Premium Efficiency



Performance : 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		180457/2016-A1	
Checked by	mmoctezuma		Page	Revision
Date	20/02/2018		1/1	2

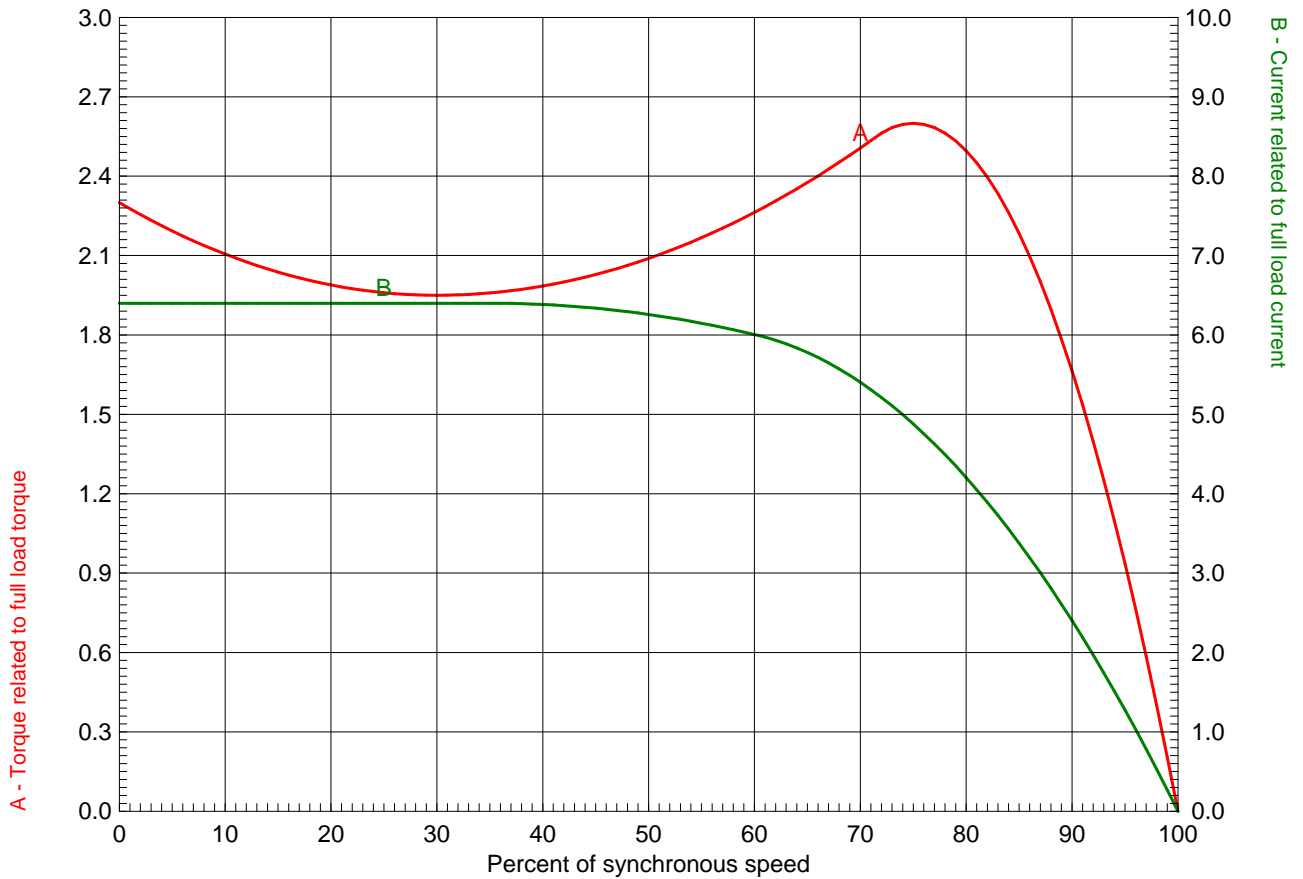
TORQUE AND CURRENT X SPEED CURVE



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

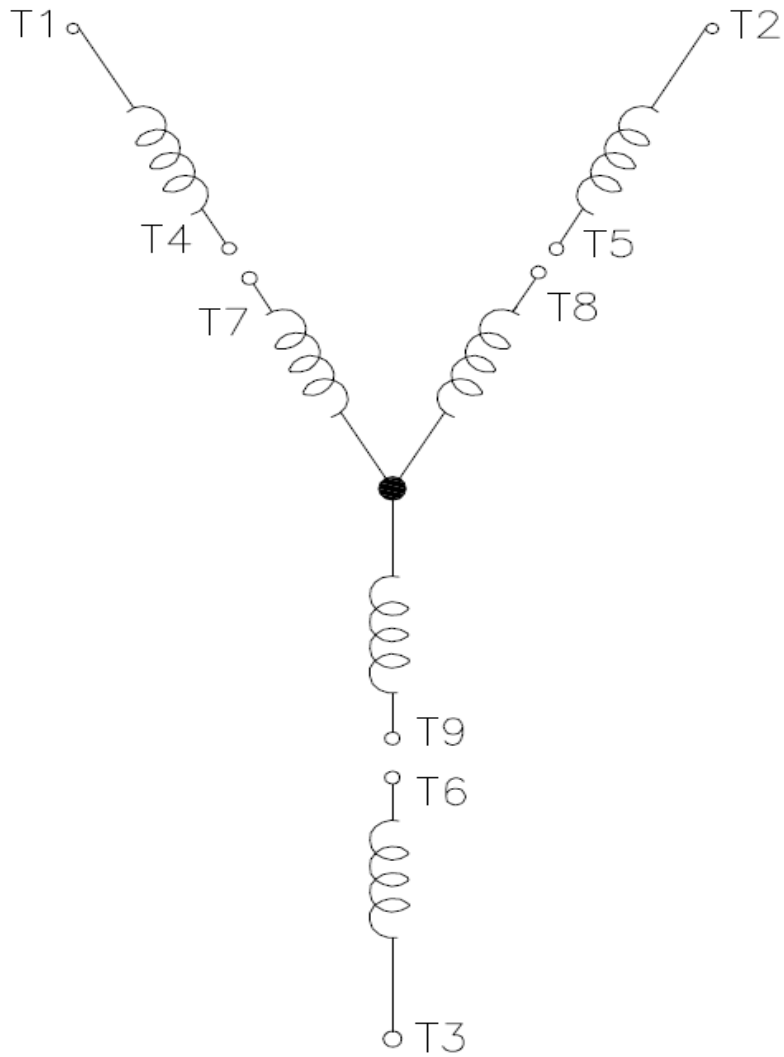
Rev.	Summary of changes	Performed	Checked	Date
Performed by	mrsanchez	180457/2016-A1		Page Revision
Checked by	mmoctezuma			
Date	20/02/2018			
			1/1	2

Wiring Diagram

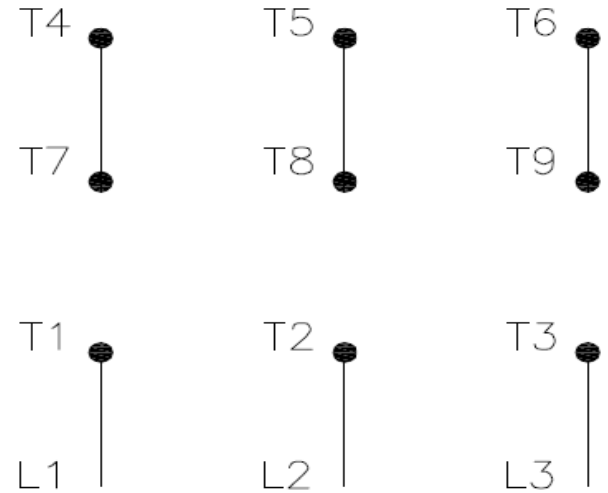


31LH48B

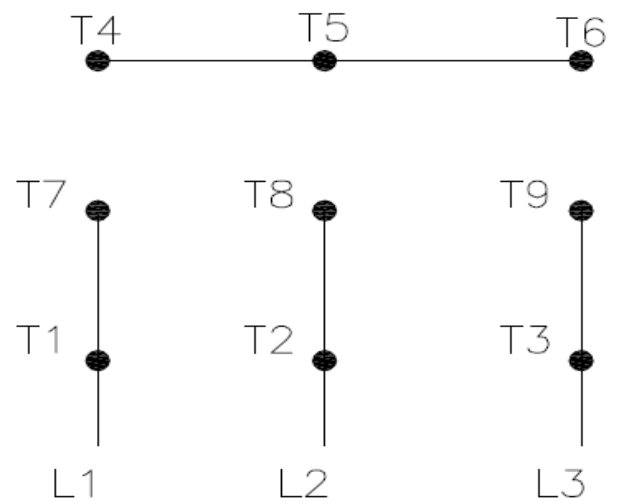
REV.
0



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.
31LH48B		0

20MAR18

Dayton®

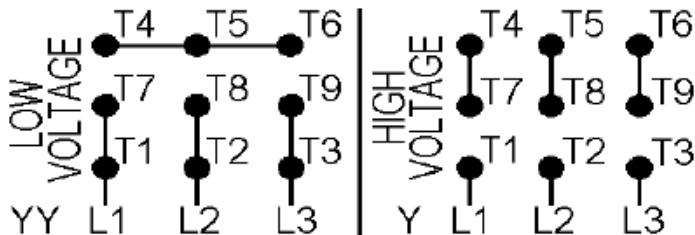
MADE IN MEXICO

NEMA
Premium®MODEL NO. **C****UL**® **US****CE** **SP**®
C **US**
Energy Verified**31LH48B**

TO0IC0X0N0000101334

MAT: 13827604

PH 3 HP (kW) **1.00(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 **3.8/1.9 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