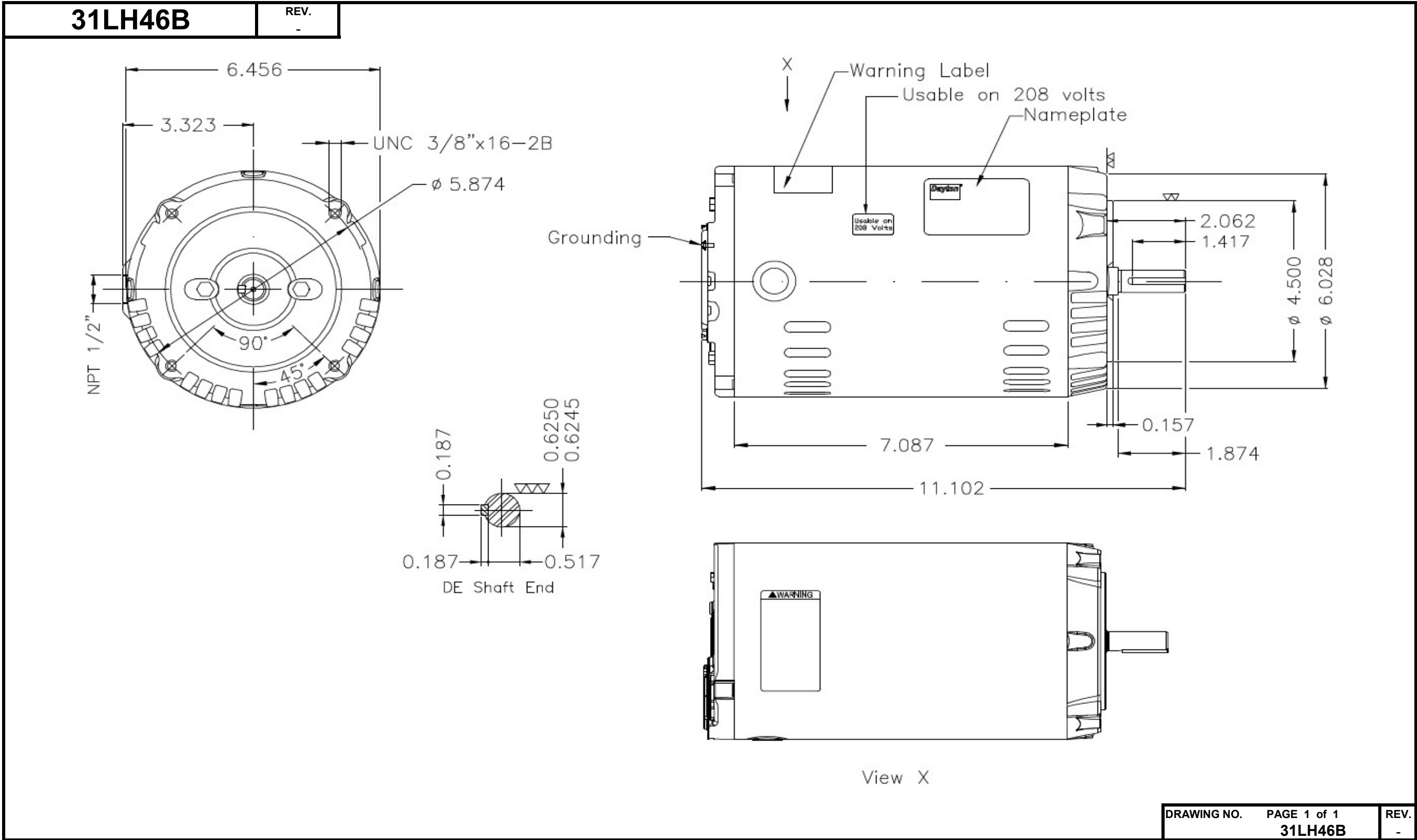


Dimensional Drawing



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31LH46B		-

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

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :
 Sales document : 20794403 - 480
 Product line : W01 - ODP - Premium Efficiency

Frame	: 56C	Locked rotor time	: 21 s (hot) 38 s (cold)
Output	: 0.75 HP (0.55 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	: 2.30/1.15 A	Cooling method	: IC01 - ODP
L. R. Amperes	: 16.8/8.39 A	Mounting	: F-1
LRC (p.u.)	: 7.3 Code K	Direct of rotation ¹	: Both
No load current	: 1.60/0.800 A	Noise level ²	: 52.0 dB(A)
Rated speed	: 1760 rpm	Vibration class	: A
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 3.03 Nm	Coupling	: Direct
Locked rotor torque	: 250 %	Approx. weight ³	: 10.6 kg
Pull up torque	: 210 %	Painting plan	: 207N
Breakdown torque	: 300 %	Color	: RAL 7021
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.0030 kgm ²		

Output	Start	50%	75%	100%	Load type: -
Efficiency (%)	-	74.0	78.5	81.1	Load torque: -
Power factor	0.69	0.52	0.65	0.74	Load inertia (J=GD ² /4): -

	Drive end	Non drive end	Foundation loads	
Bearing type	6203-ZZ	6202-ZZ	Maximum traction	: 287 N
Lubrication interval	-	-	Maximum compression	: 391 N
Lubricant amount	-	-		
Lubricant type	MOBIL POLYREX EM			

Notes:
 * Dayton # 31LH46B
 * 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.

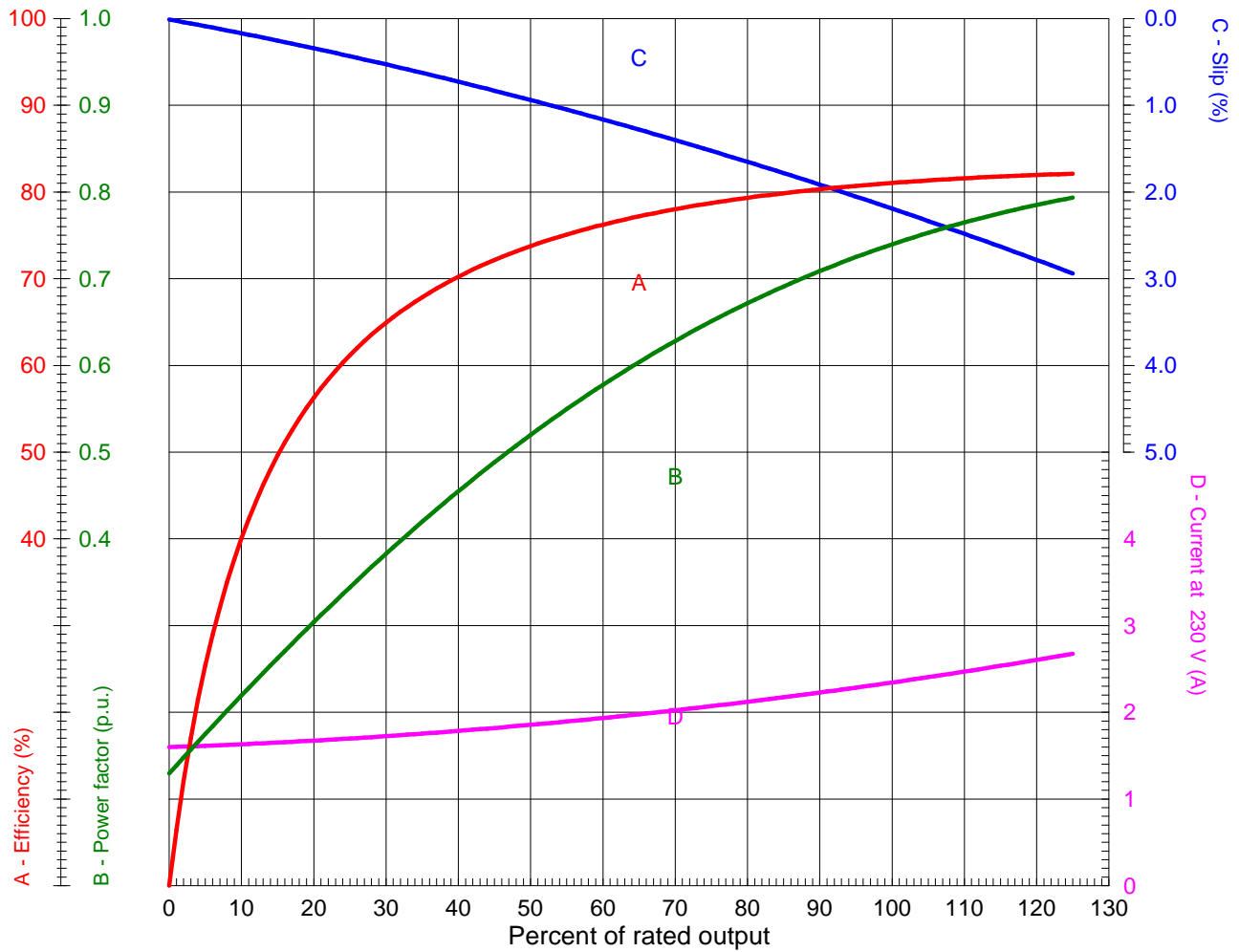
Rev.	Summary of changes	Performed	Checked	Date
Performed by	mrsanchez			179731/2016-A
Checked by	marian			Page Revision
Date	21/12/2017			1/2 2

LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :
 Sales document : 20794403 - 480
 Product line : W01 - ODP - Premium Efficiency



Performance : 0.75 HP (0.55 kW) 230/460 V 60 Hz 4P 56C

Rated current : 2.30/1.15 A	Moment of inertia (J) : 0.0030 kgm ²
LRC (p.u.) : 7.3 Code K	Duty cycle : Cont.(S1)
Rated torque : 3.03 Nm	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.25
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1760 rpm	

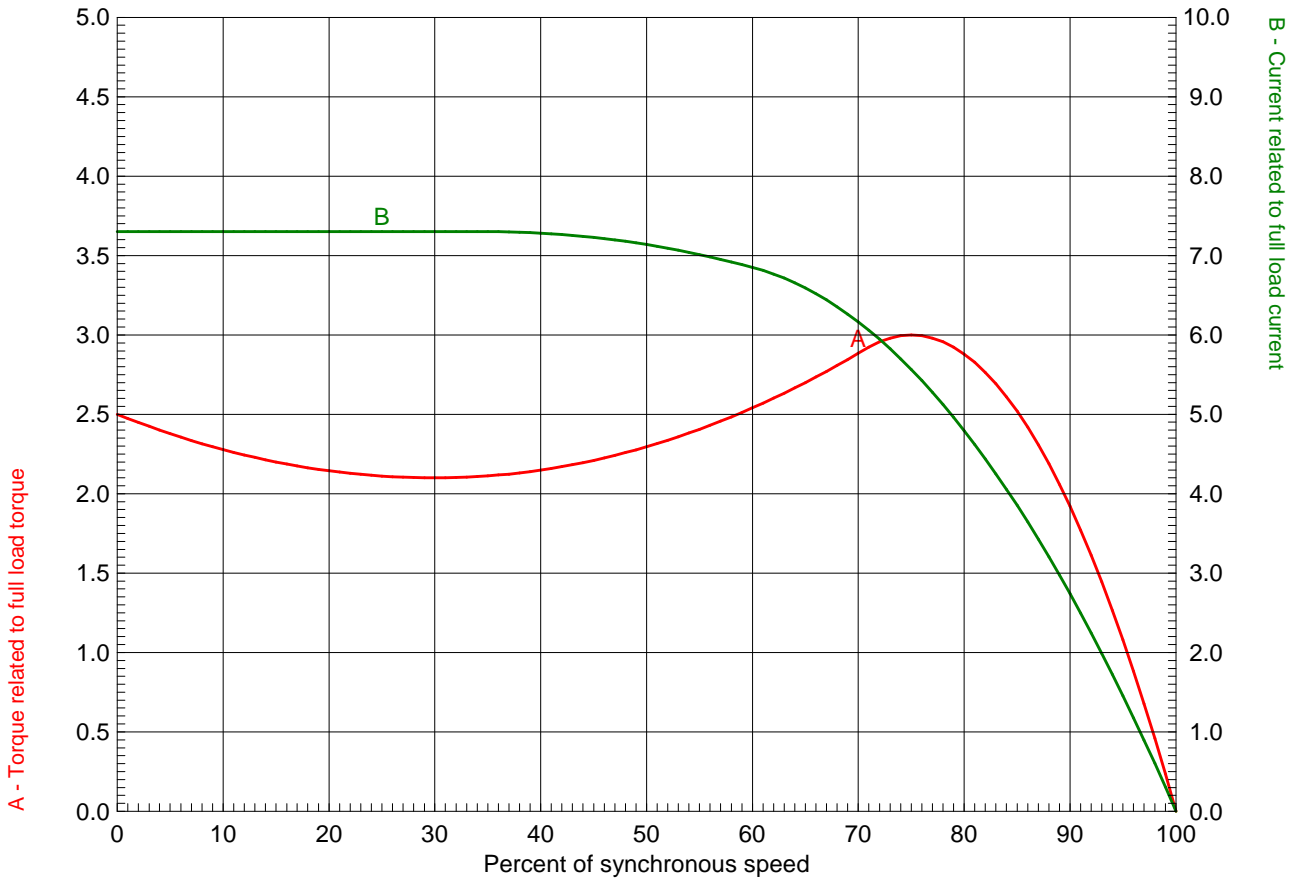
Rev.	Summary of changes	Performed	Checked	Date
Performed by	mrsanchez			
Checked by	marian			
Date	21/12/2017			
			179731/2016-A1	
			Page	Revision
			1/1	2

TORQUE AND CURRENT X SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :
 Sales document : 20794403 - 480
 Product line : W01 - ODP - Premium Efficiency



Performance : 0.75 HP (0.55 kW) 230/460 V 60 Hz 4P 56C

Rated current : 2.30/1.15 A	Moment of inertia (J) : 0.0030 kgm ²
LRC (p.u.) : 7.3 Code K	Duty cycle : Cont.(S1)
Rated torque : 3.03 Nm	Insulation class : F
Locked rotor torque : 250 %	Service factor : 1.25
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1760 rpm	

Locked rotor time 100% : 21 s (hot) 38 s (cold)
 Load inertia (J=GD²/4) : 0.003 kgm²

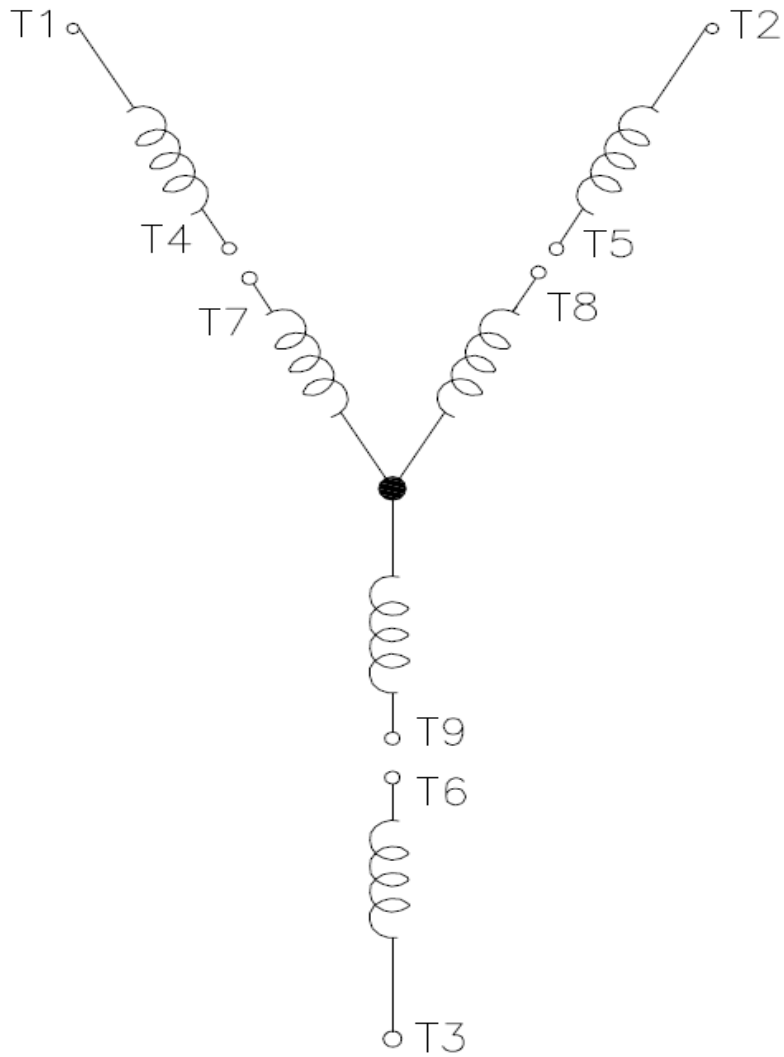
Rev.	Summary of changes	Performed	Checked	Date
Performed by	mrsanchez	179731/2016-A1		
Checked by	marian	Page	Revision	
Date	21/12/2017	1/1	2	

Wiring Diagram

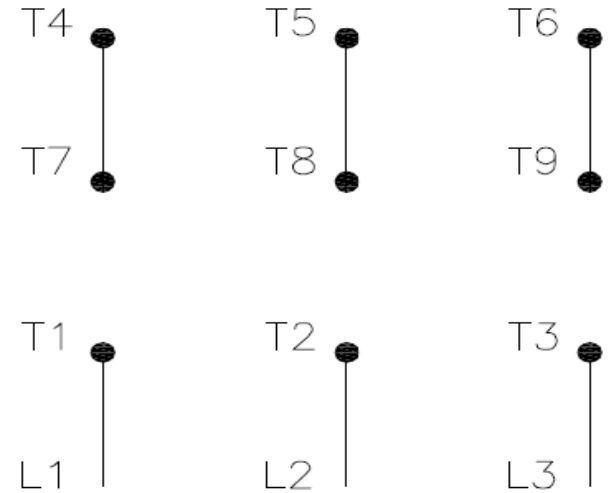


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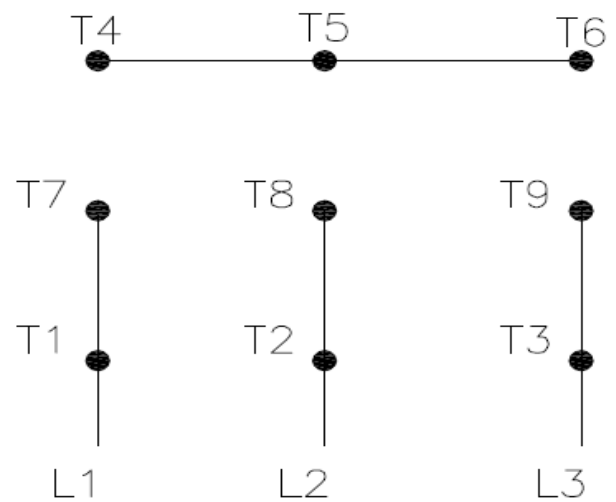
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High Voltage (Y)



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.

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16MAR18

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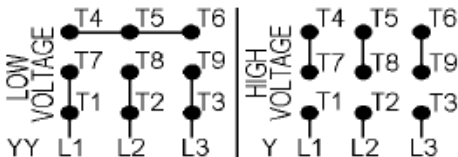
MODEL NO.

CEC® **US****CE** **CSA**® **US****31LH46B**

TO0IC0X0X0000300437

MAT: 13827602

PH 3	HP (kW) 0.75(0.55)
HZ 60	V 230/460
RPM 1760	A 2.30/1.15
FR 56C	DES B
IP 21	ENCL ODP
AMB 40 °C	CODE K
SF 1.25	INS F ΔT 80 K
SFA 2.8/1.4 A	PF 0.74
DUTY CONT	
AVG F.L. EFF.	81.1%



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
0.75HP 2.62-2.43/1.31-1.29 A 1445 RPM S.F.1.25

S/N:

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