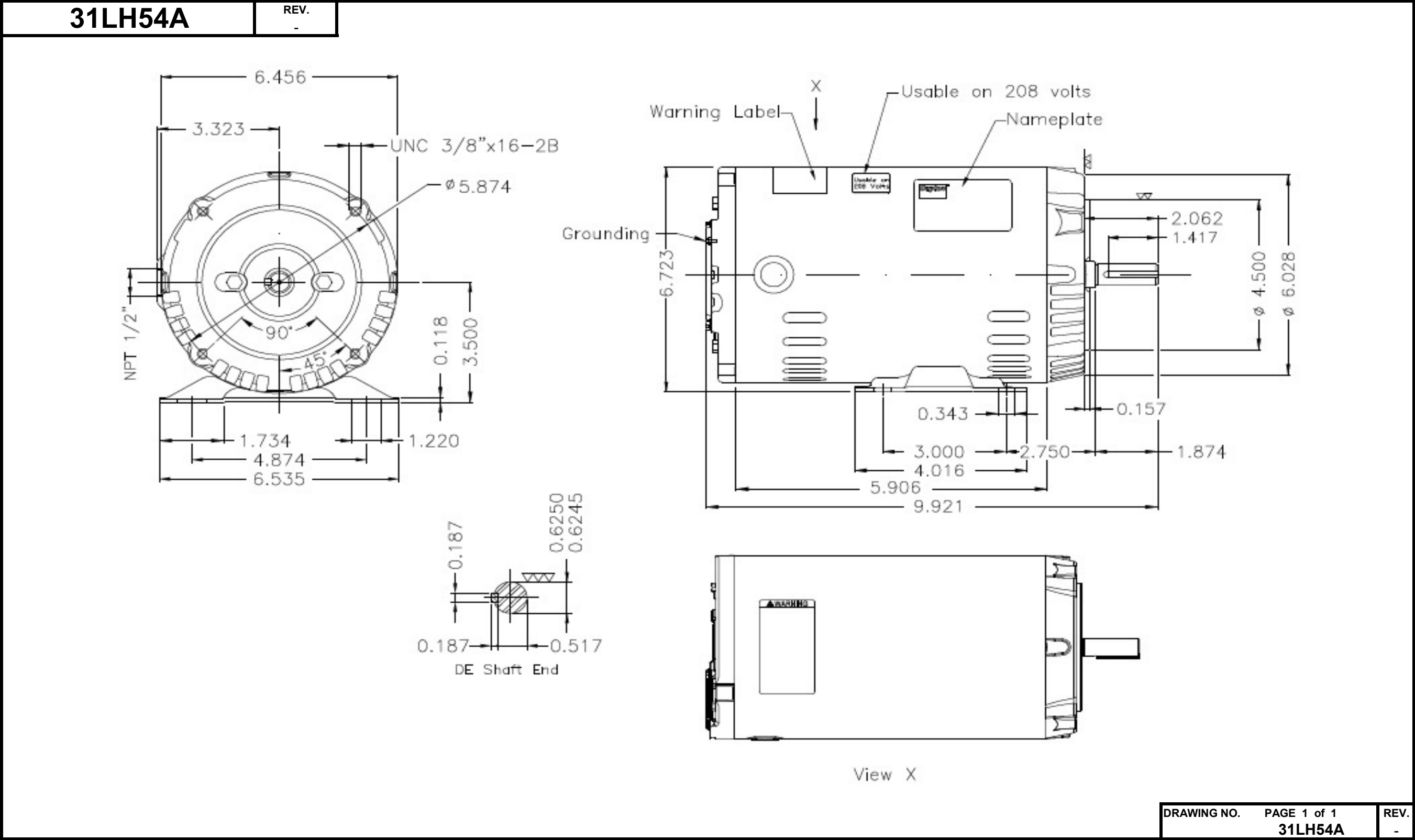


Dimensional Drawing



DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer

Product line : W01 - ODP - Premium Efficiency

Frame	: 56C	Locked rotor time	: 38 s (hot) 68 s (cold)
Output	: 0.25 HP (0.18 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	: 1.07/0.533 A	Cooling method	: IC01 - ODP
L. R. Amperes	: 6.29/3.14 A	Mounting	: F-1
LRC (p.u.)	: 5.9 Code M	Direct of rotation ¹	: Both
No load current	: 1.00/0.500 A	Noise level ²	: 52.0 dB(A)
Rated speed	: 1765 rpm	Starting method	: Direct On Line
Slip	: 1.94 %	Approx. weight ³	: 15.7 lb
Rated torque	: 0.744 ft.lb		
Locked rotor torque	: 230 %		
Pull up torque	: 195 %		
Breakdown torque	: 330 %		
Insulation class	: F		
Service factor	: 1.35		
Moment of inertia (J)	: 0.0380 sq.ft.lb		

Output	Start	50%	75%	100%	Load type	: -
Efficiency (%)	-	57.5	64.0	69.5	Load torque	: 0.744 ft.lb
Power factor	0.73	0.41	0.52	0.61	Load inertia (J=GD ² /4)	: 0.0380 sq.ft.lb

	Drive end	Non drive end	Foundation loads
Bearing type	6203-ZZ	6202-ZZ	Maximum traction : 21 lb
Lubrication interval	-	-	Maximum compression : 37 lb
Lubricant amount	-	-	
Lubricant type	MOBIL POLYREX EM		

Notes:
 * Dayton # 31LH54A
 * 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			181458/2016-A
Checked by	marian			Page Revision
Date	06/09/2017			1/2 1

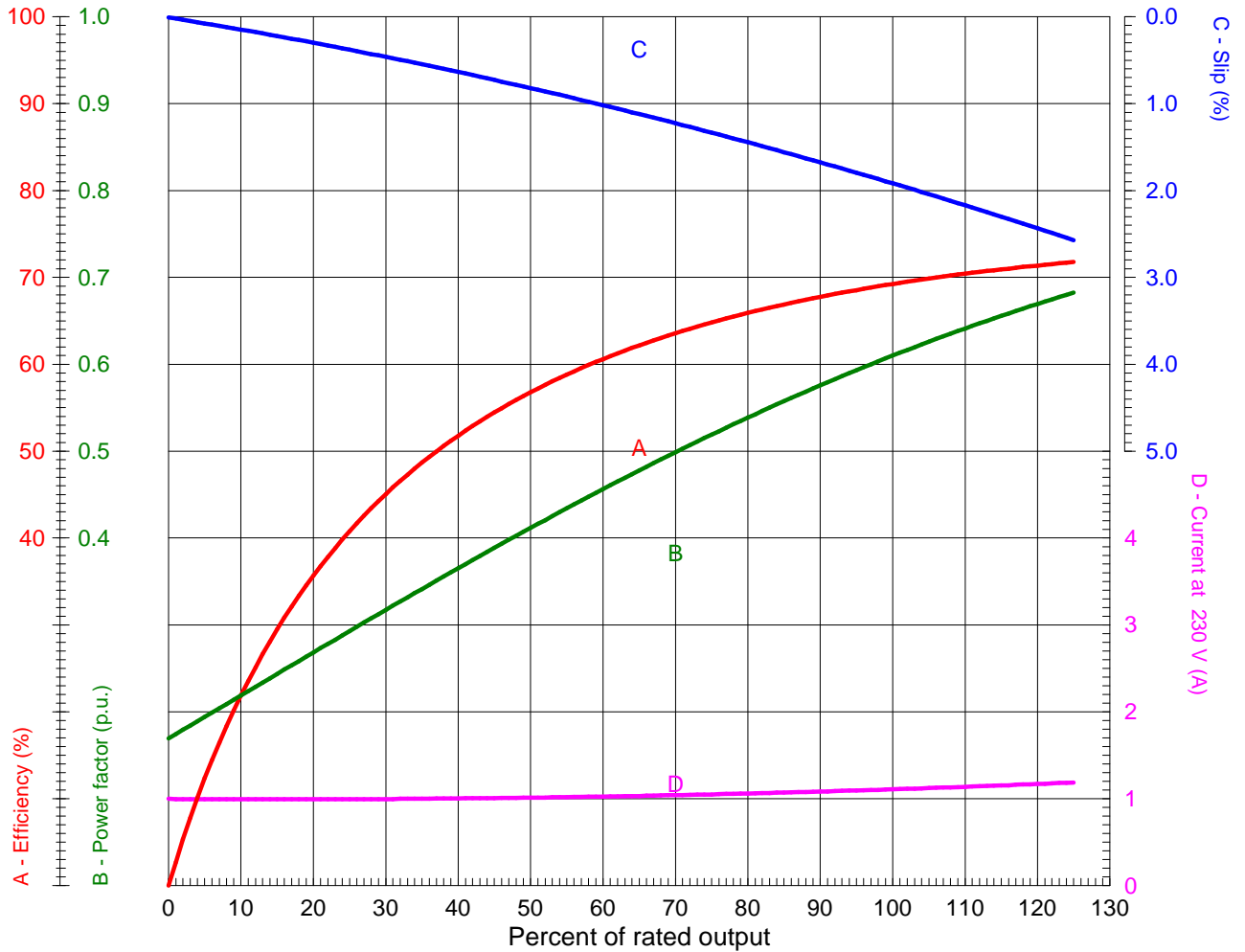
LOAD PERFORMANCE CURVE



Three Phase Induction Motor - Squirrel Cage

Customer

Product line : W01 - ODP - Premium Efficiency



Performance : 0.25 HP (0.18 kW) 230/460 V 60 Hz 4P 56C

Rated current	: 1.07/0.533 A	Moment of inertia (J)	: 0.0380 sq.ft.lb
LRC (p.u.)	: 5.9 Code M	Duty cycle	: Cont.(S1)
Rated torque	: 0.744 ft.lb	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.35
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm		

Rev.	Summary of changes		Performed	Checked	Date
Performed by	mrsanchez	Notes: * Dayton # 31LH54A * Connection YY/Y - Document 10003174687	181458/2016-A1		
Checked by	marian		Page	Revision	
Date	06/09/2017		1/1	1	

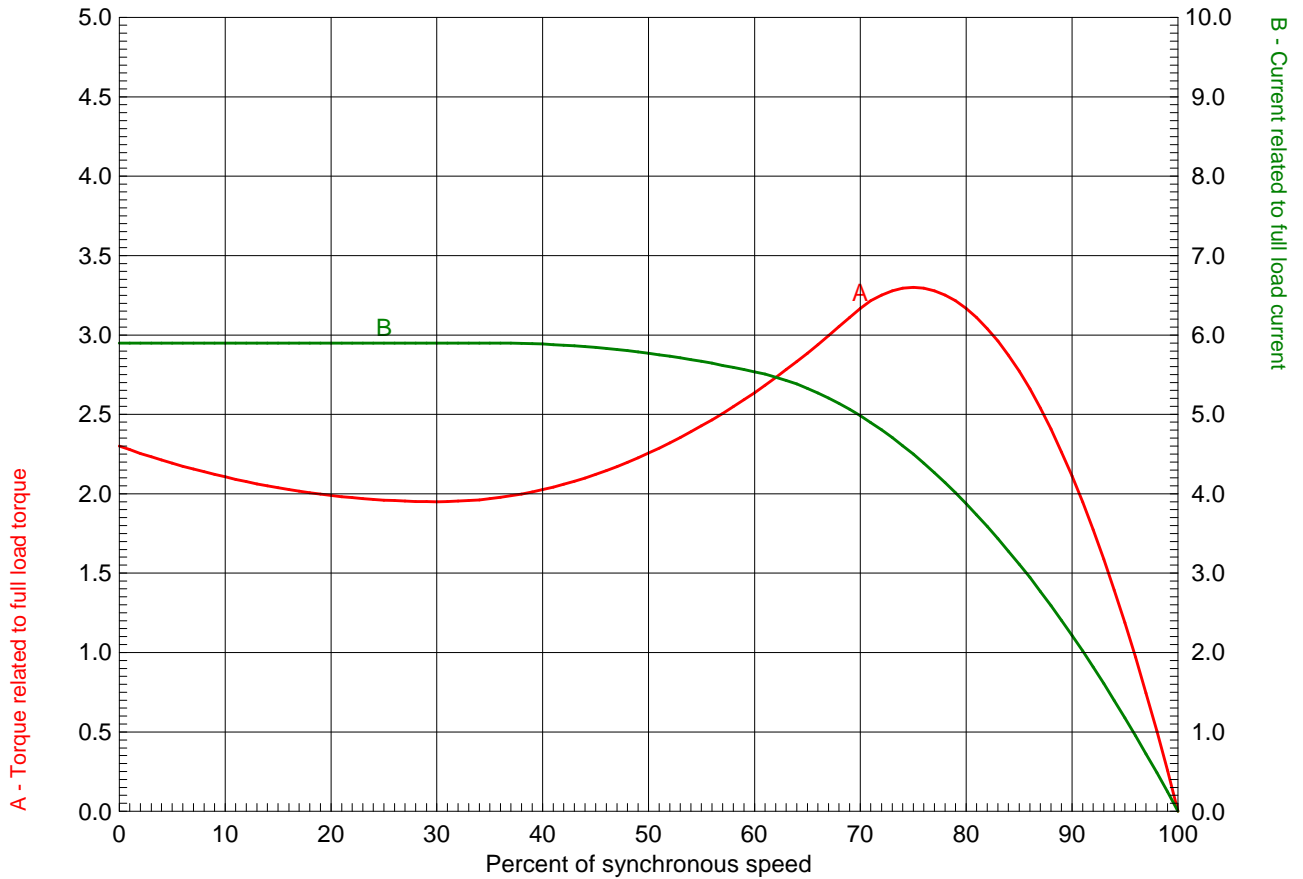
TORQUE AND CURRENT X SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer

Product line : W01 - ODP - Premium Efficiency



Performance : 0.25 HP (0.18 kW) 230/460 V 60 Hz 4P 56C

Rated current : 1.07/0.533 A	Moment of inertia (J) : 0.0380 sq.ft.lb
LRC (p.u.) : 5.9 Code M	Duty cycle : Cont.(S1)
Rated torque : 0.744 ft.lb	Insulation class : F
Locked rotor torque : 230 %	Service factor : 1.35
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 1765 rpm	

Locked rotor time 100% : 38 s (hot) 68 s (cold)
 Load inertia (J=GD²/4) : 0.0380 sq.ft.lb

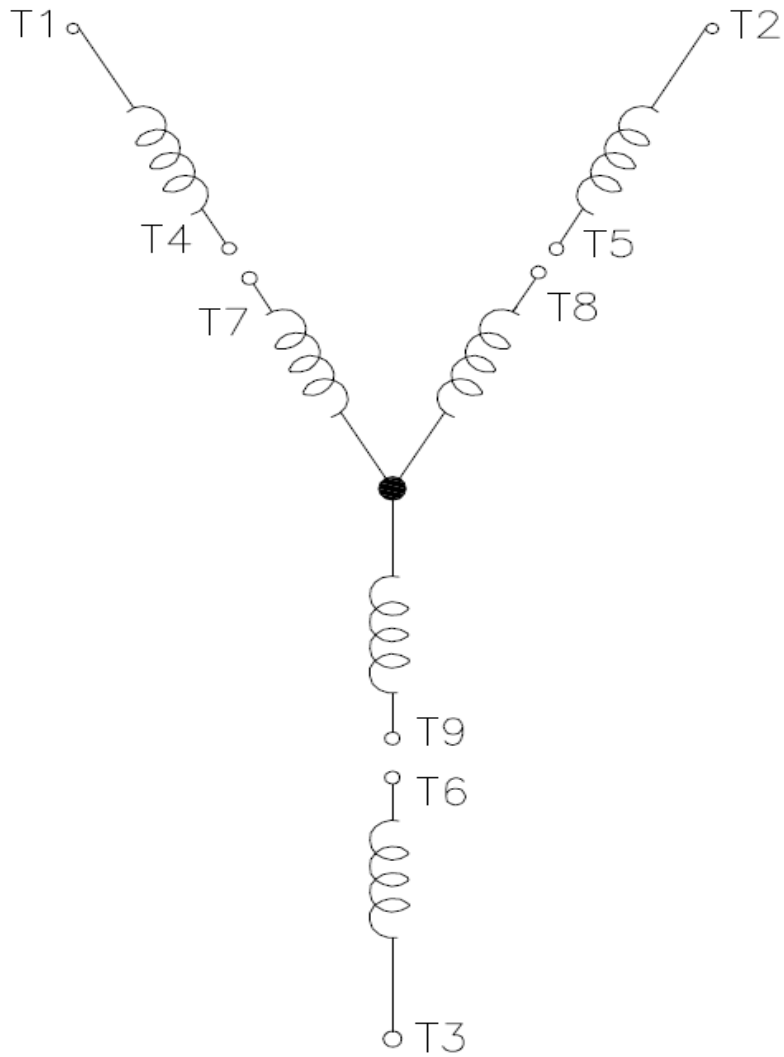
Rev.	Summary of changes		Performed	Checked	Date
Performed by	mrsanchez	Notes: * Dayton # 31LH54A * Connection YY/Y - Document 10003174687	181458/2016-A1		
Checked by	marian		Page	Revision	
Date	06/09/2017		1/1	1	

Wiring Diagram

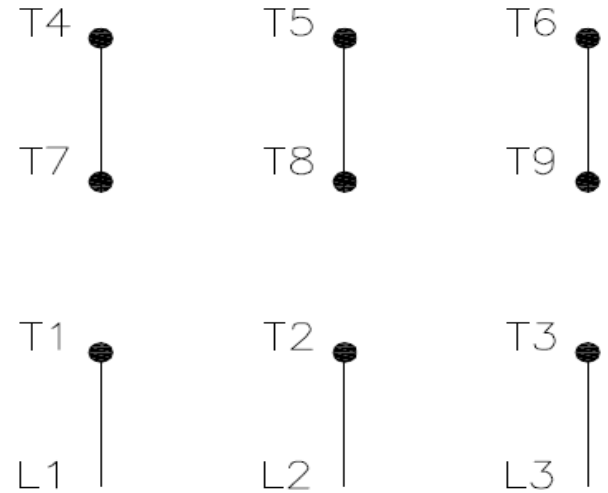


31LH54A

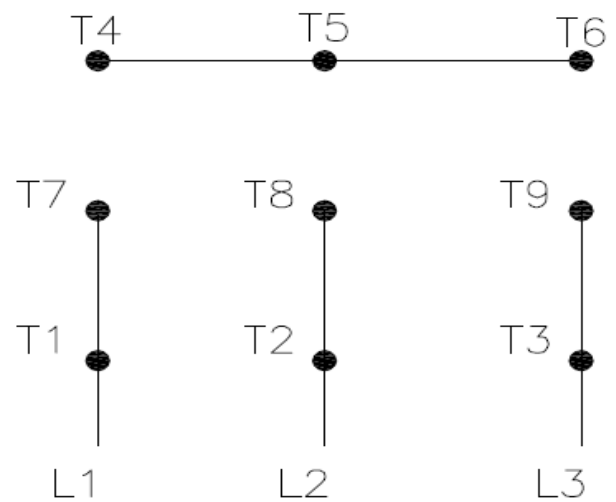
REV.
0



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.
31LH54A		0

02OUT17

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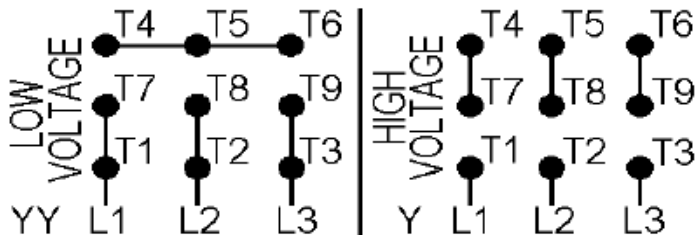
MODEL NO.

cRU® **US****CE****SP**®
US**31LH54A**

TO0IC0X0X0000300172

MAT: 13799779

PH 3	HP (kW) 0.25(0.18)
HZ 60	V 230/460
RPM 1765	A 1.07/0.53
FR 56C	DES B
IP 21	ENCL ODP
AMB 40 °C	CODE M
SF 1.35	INS F ΔT 80 K
SFA 1.4/0.7 A	PF 0.61
DUTY CONT	
AVG. F.L. EFF.	69.5%



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
0.25HP 1.14-1.15/0.57-0.61 A 1455 RPM S.F. 1.35

S/N:

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