

Dimensional Drawing



36VF84A

REV. -

The drawing includes the following views and dimensions:

- Front View:** Shows the motor's circular face with a central shaft. Dimensions include a total width of 7.638, a mounting bracket width of 5.873, and a mounting hole diameter of $\phi 5.874$. The mounting holes are spaced at 90° and 45° angles. The mounting bracket has a thickness of 2.629 and a height of 1.784. The base has a total width of 6.535 and a height of 3.500. The base is secured with UNC 3/8"x16-2B bolts.
- Top View:** Shows the motor's top surface with a width of 4.563 and a height of 4.090. It includes a grounding point and a mounting hole with a diameter of 0.881.
- Side View:** Shows the motor's side profile with a total height of 7.337 and a mounting bracket height of 6.723. It includes a warning label, a nameplate, and a mounting hole with a diameter of 2.062. The base has a total width of 13.504 and a height of 1.874. The base is secured with 0.343 diameter bolts. The base has a total width of 7.874 and a height of 4.016. The base has a total width of 3.000 and a height of 2.750. The base has a total width of 0.157 and a height of 0.6250. The base has a total width of 0.6245 and a height of 0.517.
- DE Shaft End View:** Shows the motor's shaft end with a diameter of 0.187 and a height of 0.6250. The shaft has a diameter of 0.187 and a height of 0.517.
- View X:** Shows the motor's side profile from a different angle, highlighting the mounting bracket and the base.

Labels include: Warning Label, Usable on 208 volts, Nameplate, and Grounding.

DRAWING NO. PAGE 1 of 1 REV. 36VF84A

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

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:	
Sales document	:	20757613 - 390
Product line	:	W01 - TEFC - Premium Efficiency (DOE)
Part #		: 36VF84A

Frame	:	56C	Locked rotor time	:	31 s (hot) 56 s (cold)
Output	:	1 HP (0.75 kW)	Temperature rise ⁴	:	80 K
Poles	:	6	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	:	3.16/1.58 A	Degree of protection	:	IP55
L. R. Amperes	:	18.3/9.16 A	Cooling method	:	IC411 - TEFC
LRC (p.u.)	:	5.8 Code J	Mounting	:	F-1
No load current	:	2.03/1.01 A	Direct of rotation ¹	:	Both
Rated speed	:	1145 rpm	Noise level ²	:	50.0 dB(A)
Slip	:	4.58 %	Vibration class	:	A
Rated torque	:	4.59 ft.lb	Starting method	:	Direct On Line
Locked rotor torque	:	230 %	Coupling	:	Direct
Pull up torque	:	195 %	Approx. weight ³	:	38.6 lb
Breakdown torque	:	280 %	Painting plan	:	207N
Insulation class	:	F	Color	:	RAL 7021
Service factor	:	1.15	Design	:	B
Moment of inertia (J)	:	0.1590 sq.ft.lb			
Output	Start	50%	75%	100%	Load type: -
Efficiency (%)	-	80.0	82.5	82.5	Load torque: -
Power factor	0.59	0.50	0.63	0.72	Load inertia (J=GD ² /4): -
Bearing type	Drive end	Non drive end	Foundation loads		
	6204-ZZ	6202-ZZ	Maximum traction	:	117 lb
Lubrication interval	-	-	Maximum compression	:	156 lb
Lubricant amount	-	-			
Lubricant type	MOBIL POLYREX EM				

Notes:

* Dayton # 36VF84A

* 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			138662/2016-A	
Checked by	marian			Page	Revision
Date	21/12/2017			1/2	1

This document is exclusive property of Dayton Electric Mfg. Reprinting is not allowed without written authorization.

LOAD PERFORMANCE CURVE



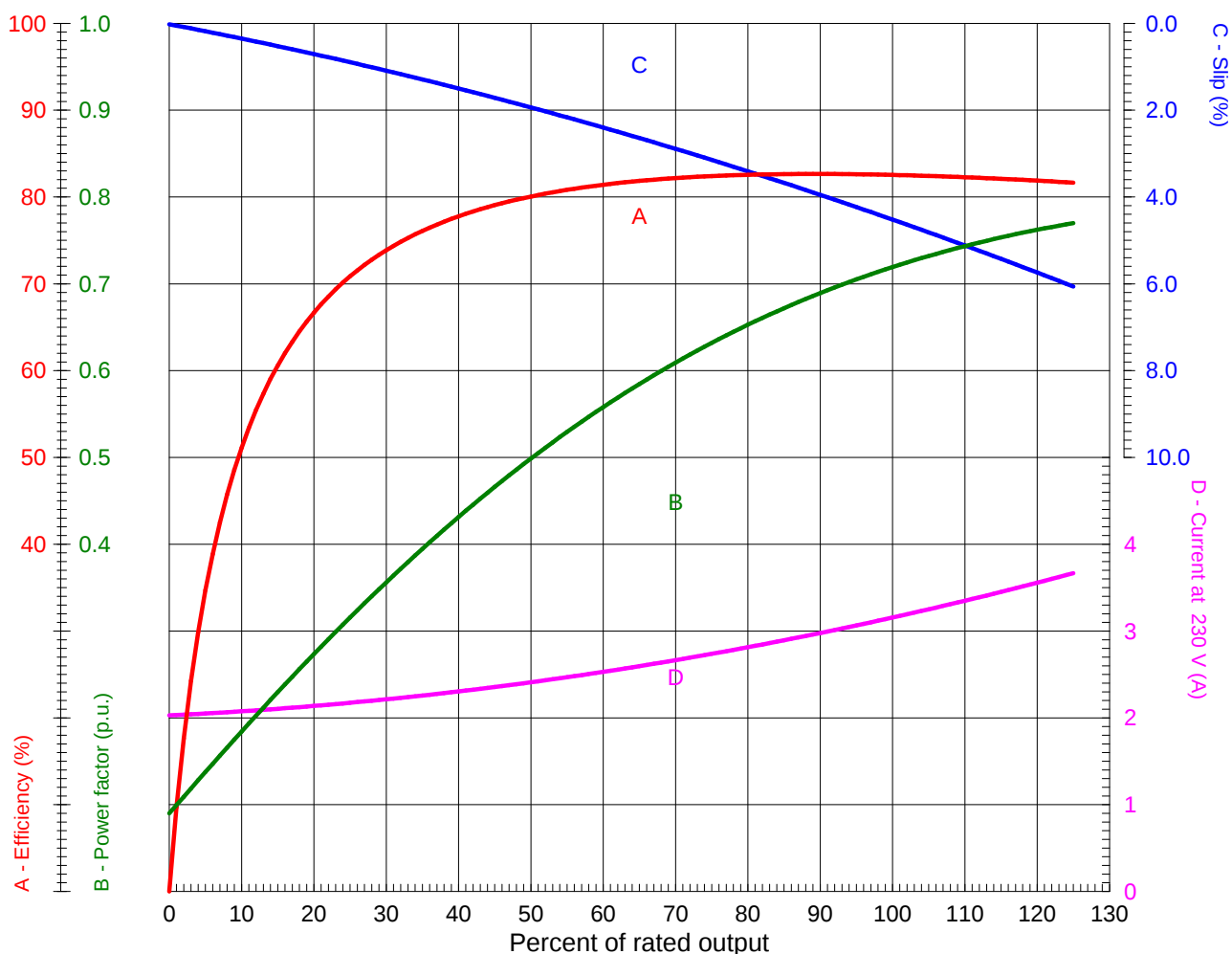
Three Phase Induction Motor - Squirrel Cage

Customer :

Sales document : 20757613 - 390

Product line : W01 - TEFC - Premium Efficiency (DOE)

Part # : 36VF84A



Performance : 1 HP (0.75 kW) 230/460 V 60 Hz 6P 56C

Rated current : 3.16/1.58 A
 LRC (p.u.) : 5.8 Code J
 Rated torque : 4.59 ft.lb
 Locked rotor torque : 230 %
 Breakdown torque : 280 %
 Rated speed : 1145 rpm

Moment of inertia (J) : 0.1590 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Summary of changes		Performed	Checked	Date
Performed by	mrsanchez		138662/2016-A1		
Checked by	marian		Page	Revision	
Date	21/12/2017		1/1	1	

This document is exclusive property of Dayton Electric Mfg. Reprinting is not allowed without written authorization.

TORQUE AND CURRENT X SPEED CURVE



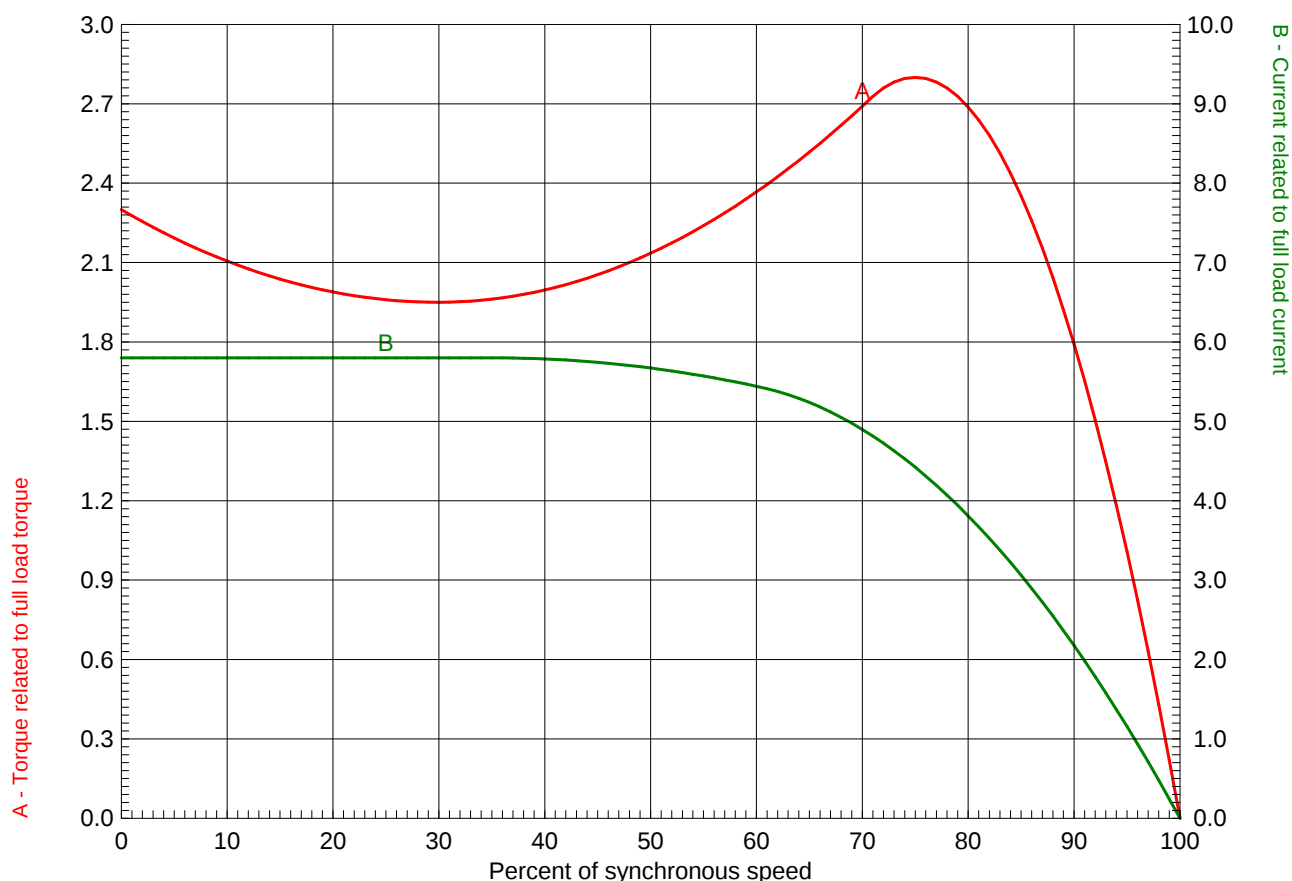
Three Phase Induction Motor - Squirrel Cage

Customer :

Sales document : 20757613 - 390

Product line : W01 - TEFC - Premium Efficiency (DOE)

Part # : 36VF84A



Performance : 1 HP (0.75 kW) 230/460 V 60 Hz 6P 56C

Rated current : 3.16/1.58 A	Moment of inertia (J) : 0.1590 sq.ft.lb
LRC (p.u.) : 5.8 Code J	Duty cycle : Cont.(S1)
Rated torque : 4.59 ft.lb	Insulation class : F
Locked rotor torque : 230 %	Service factor : 1.15
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 1145 rpm	Design : B

Locked rotor time 100% : 31 s (hot) 56 s (cold)
Load inertia (J=GD²/4) : 0.1590 sq.ft.lb

Rev.	Summary of changes		Performed	Checked	Date
Performed by	mrsanchez		138662/2016-A1		
Checked by	marian		Page	Revision	
Date	21/12/2017		1/1	1	

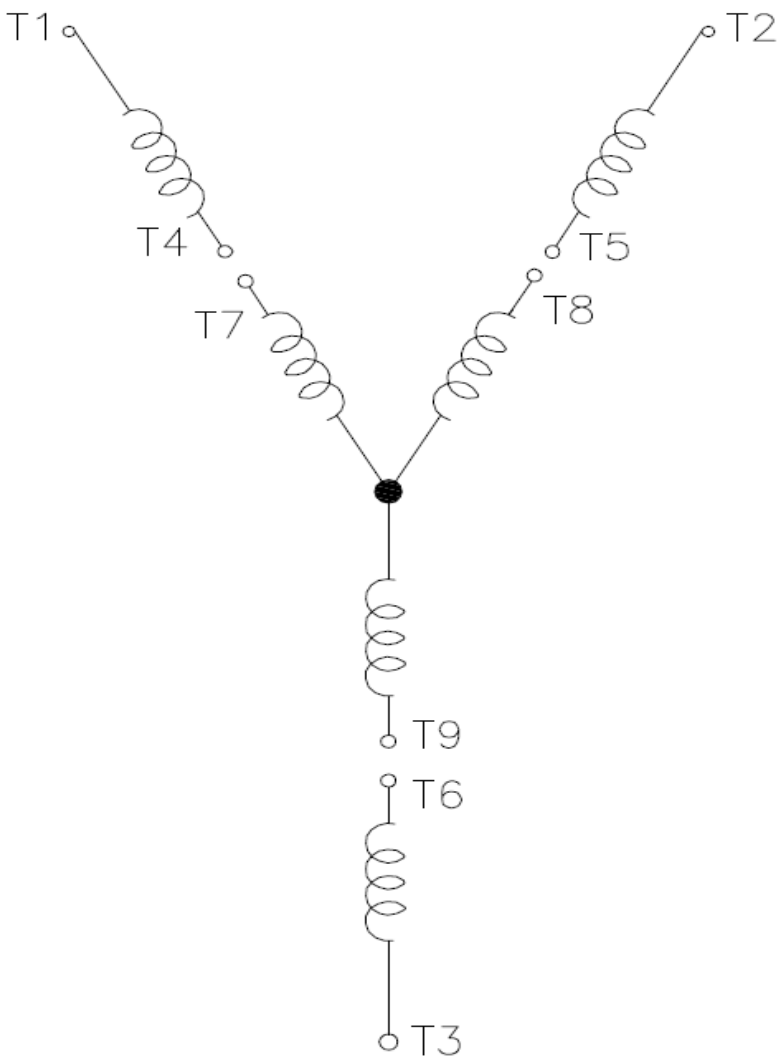
This document is exclusive property of Dayton Electric Mfg. Reprinting is not allowed without written authorization.

Wiring Diagram

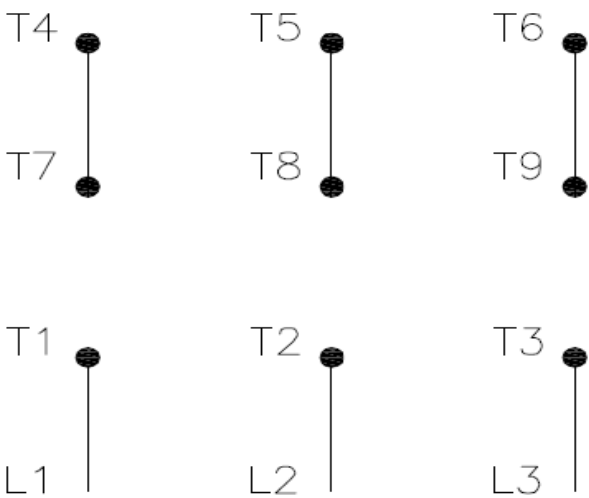


36VF84A

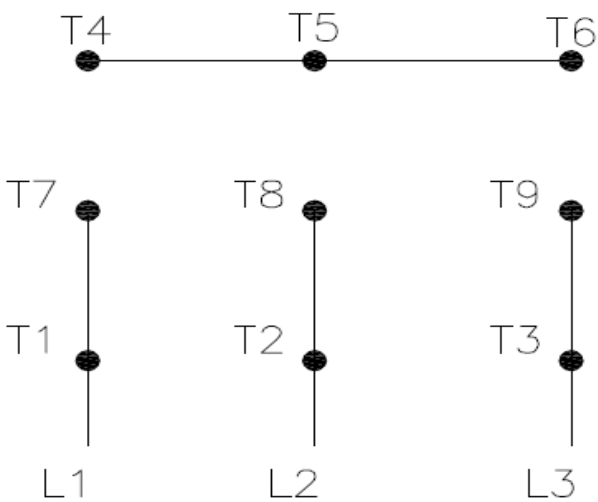
REV.
0



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.

16MAR18

MAT: 13687106

S/N:

Dayton

MADE IN MEXICO

NEMA
Premium

MODEL NO.

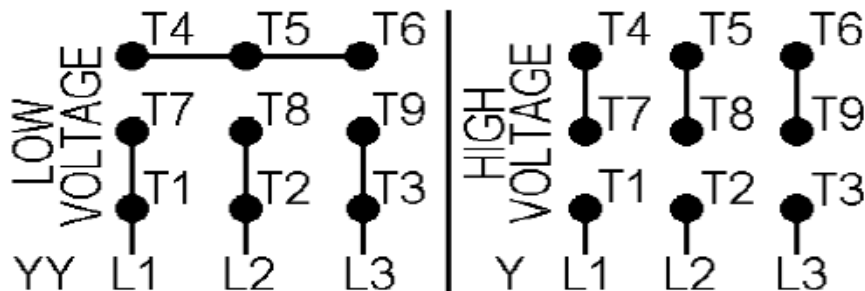
UL **US****CE**
US
Energy Verified

CC029A

36VF84A

TE0IC0X0X0000901334

PH **3** HP (kW) **1.00(0.75)**
 HZ **60** V **230/460**
 RPM **1145** A **3.16/1.58**
 FR **56C** DES **B**
 IP **55** ENCL **TEFC**
 AMB **40 °C** CODE **J**
 SF **1.15** INS **F** ΔT **80 K**
 SFA **3.6/1.8 A** PF **0.72**
 DUTY **CONT**
 NEMA NOM. EFF. **82.5%**



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
1.0HP 3.74-3.36/1.87-1.78 A 915 RPM S.F.1.00

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