DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer : Automation Direct

Product line : Premium Efficiency Three-Phase

Product code : 14799195
Catalog # : 00236ET3E56C-S

Frame	: 56HC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 2 HP (1.5 kW)	Temperature rise	: 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	: 4.94/2.47 A	Protection degree	: IP55
L. R. Amperes	: 48.9/24.5 A	Cooling method	: IC411 - TEFC
LRC	: 9.9x(Code L)	Mounting	: F-1
No load current	: 2.13/1.06 A	Rotation¹	: Both (CW and CCW)
Rated speed	: 3520 rpm	Noise level²	: 68.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 2.98 ft.lb	Approx. weight³	: 40.4 lb
Locked rotor torque	: 250 %		
Breakdown torque	: 300 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.1279 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%
Efficiency (%)	82.1	82.5	85.5	85.5
Power Factor	0.45	0.73	0.83	0.89

Foundation loads

Max. traction	: 101 lb
Max. compression	: 141 lb

		Drive end	Non drive end
Bearing type	:	6204 ZZ	6202 ZZ
Sealing	:	V'Ring	Without Bearing Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Notes
USABLE @208V 5.46A SF 1.00 SFA 5.46A

This revision replaces and cancel the previous one, which must be eliminated.
(1) Looking the motor from the shaft end.
(2) Measured at 1m and with tolerance of +3dB(A).
(3) Approximate weight subject to changes after manufacturing process.
(4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date

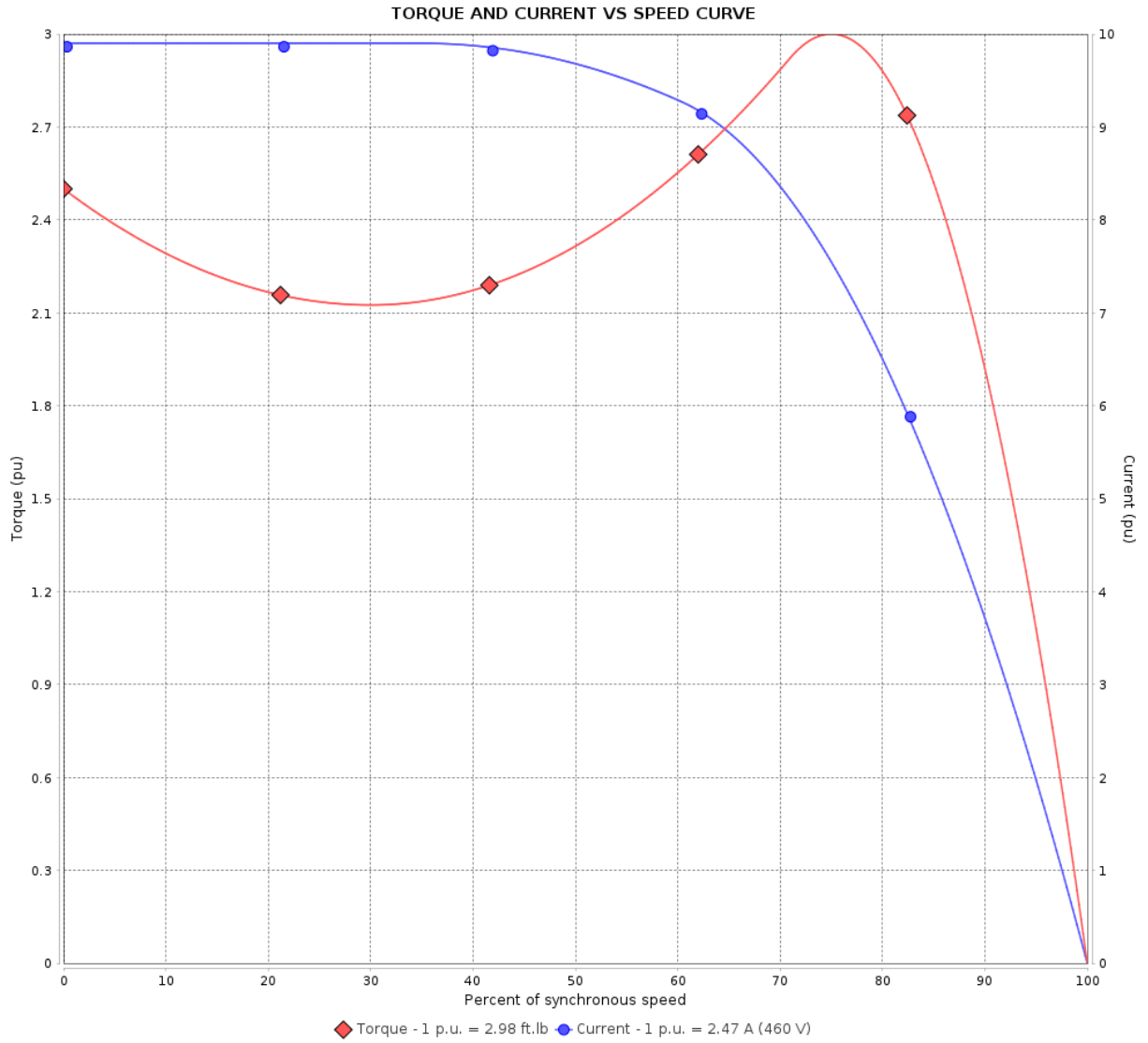
Performed by				
Checked by			Page	Revision
Date	23/08/2022		1 / 5	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct

Product line	: Premium Efficiency Three-Phase	Product code :	14799195
		Catalog # :	00236ET3E56C-S



Performance	: 230/460 V 60 Hz 2P

Rated current	: 4.94/2.47 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 9.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

Locked rotor time	: 23s (cold) 13s (hot)

Rev.	Changes Summary	Performed	Checked	Date

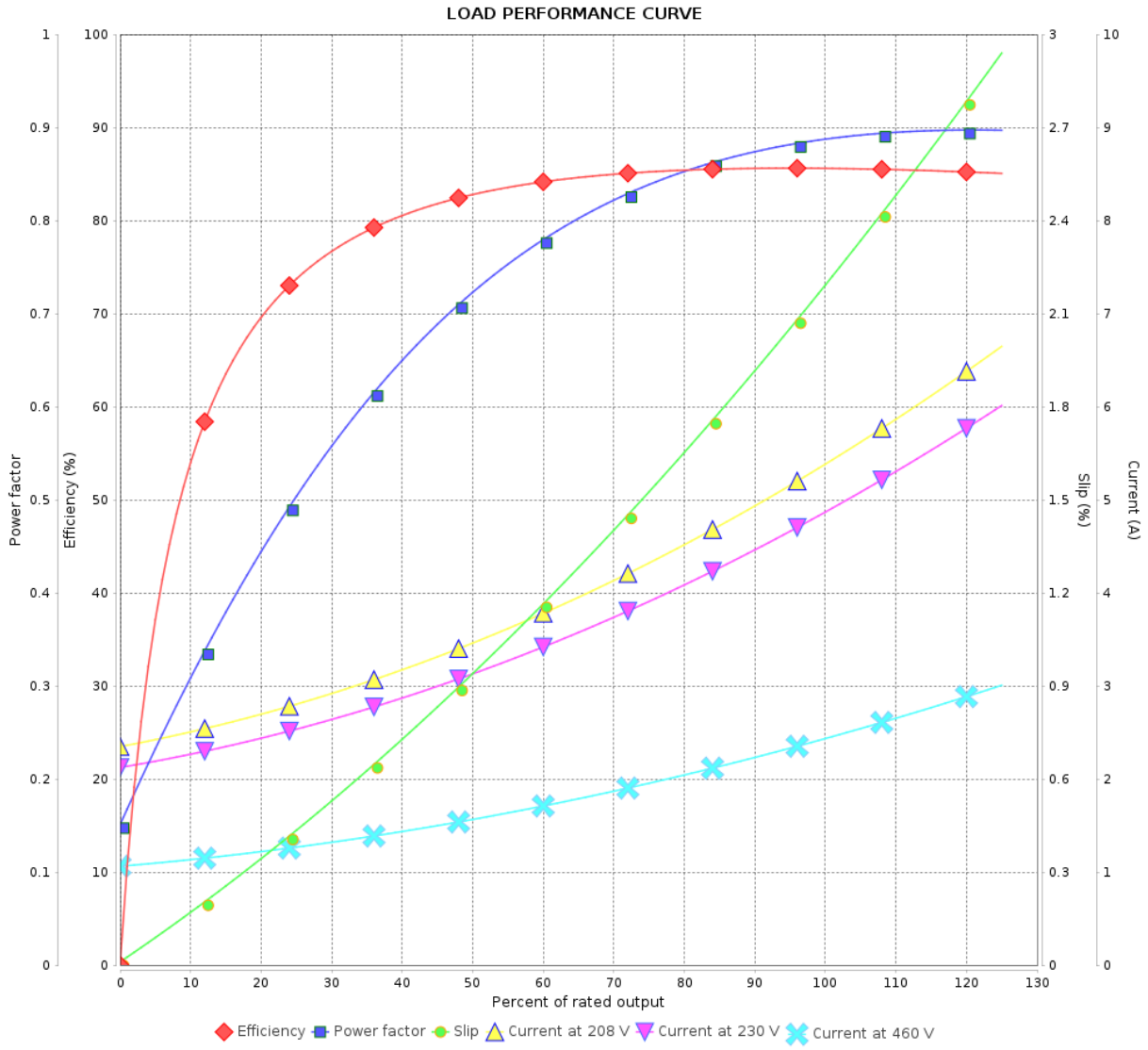
Performed by				
Checked by			Page	Revision
Date	23/08/2022		2 / 5	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct

Product line	: Premium Efficiency Three-Phase	Product code :	14799195
		Catalog # :	00236ET3E56C-S



Performance	: 230/460 V 60 Hz 2P		
Rated current	: 4.94/2.47 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 9.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date

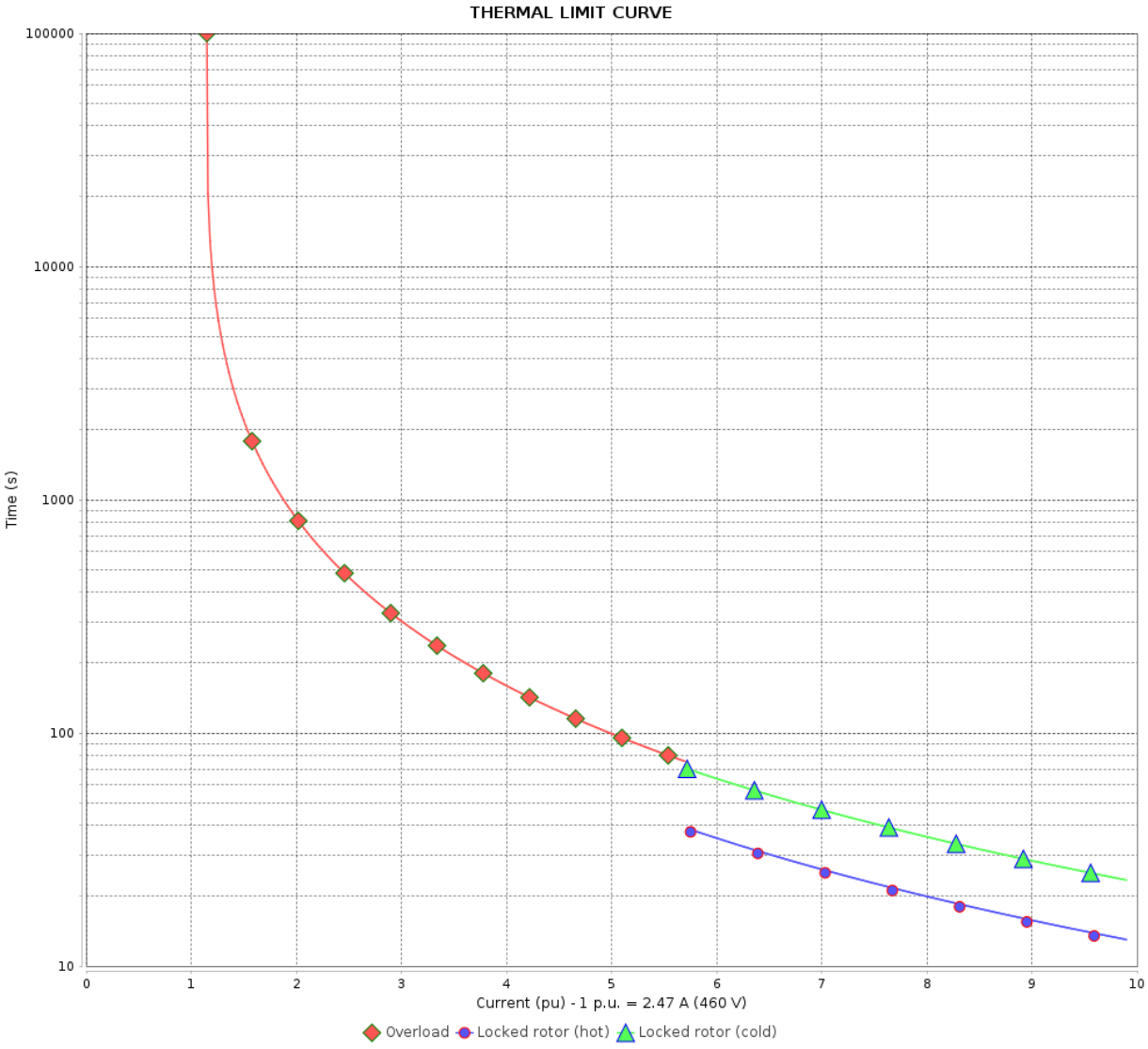
Performed by				
Checked by			Page	Revision
Date	23/08/2022		3 / 5	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct

Product line	: Premium Efficiency Three-Phase	Product code : Catalog # :	14799195 00236ET3E56C-S



Performance	: 230/460 V 60 Hz 2P

Rated current	: 4.94/2.47 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 9.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

Heating constant	
Cooling constant	

Rev.	Changes Summary	Performed	Checked	Date

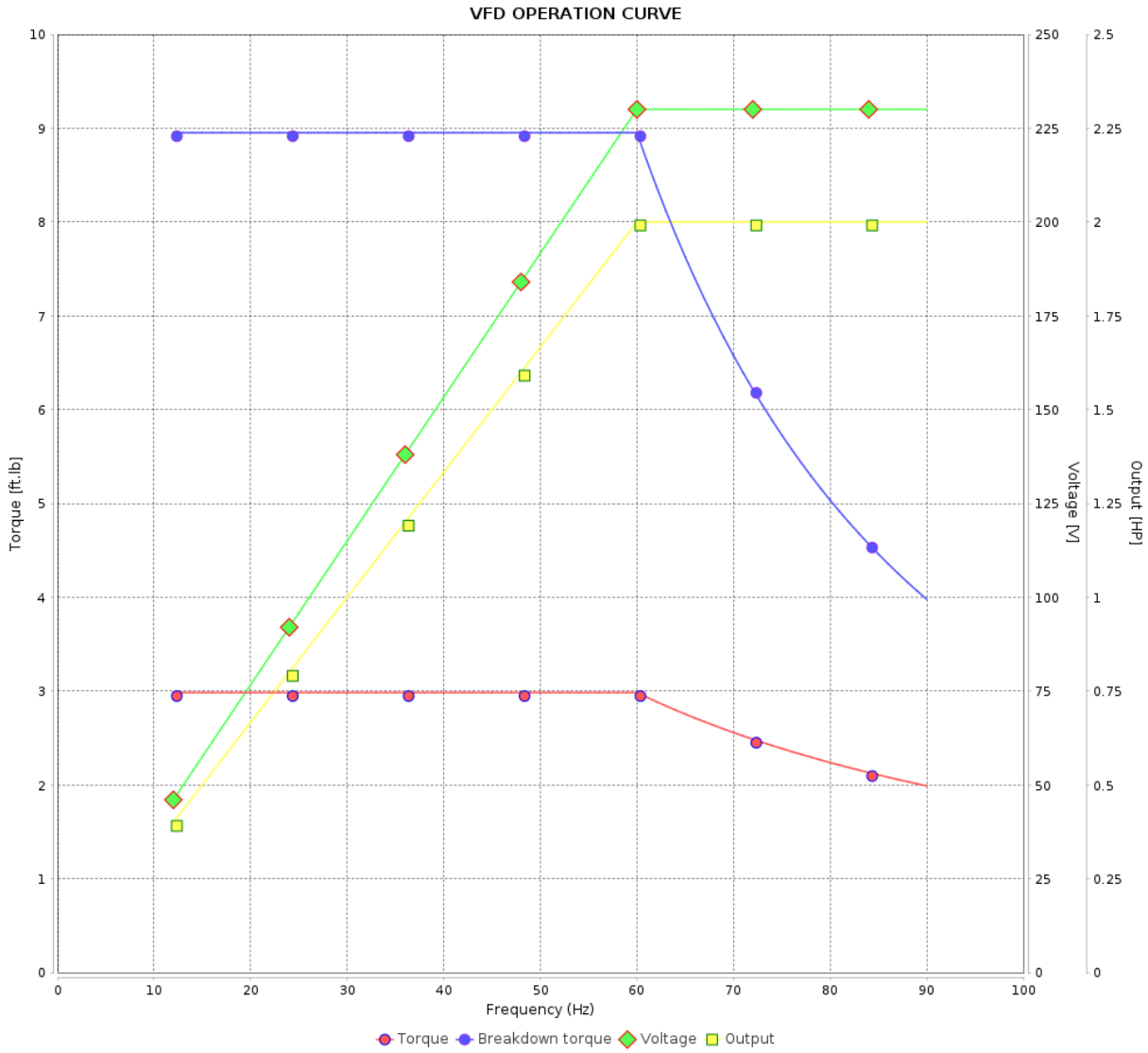
Performed by				
Checked by			Page	Revision
Date	23/08/2022		4 / 5	

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct

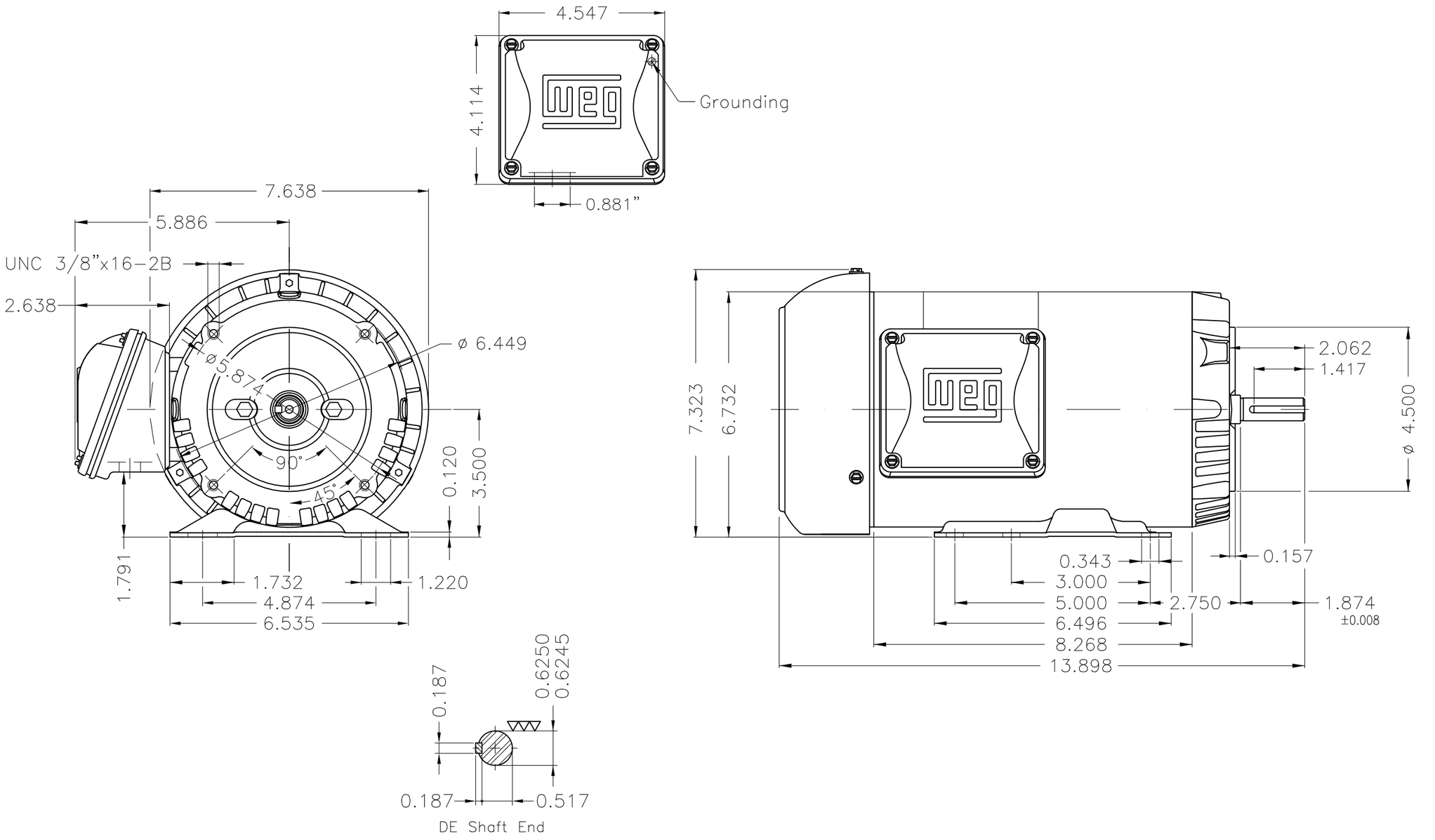
Product line	: Premium Efficiency Three-Phase	Product code :	14799195
		Catalog # :	00236ET3E56C-S



Performance	: 230/460 V 60 Hz 2P		
Rated current	: 4.94/2.47 A	Moment of inertia (J)	: 0.1279 sq.ft.lb
LRC	: 9.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date

Performed by				
Checked by			Page	Revision
Date	23/08/2022		5 / 5	



Fan cover - steel plate							
Color Munsell N 1 matte black							
Painting plan 207N							
Mounting F-1/B34R(D)							
ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER

EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.	PREVIEW		
CHECKED		FRAME 56HC IP55 TEFC	WDD		
RELEASED					
REL DT.		WMO Jaragua do Sul Product Engineering	SHEET 1 / 1		

2 HP 02 Poles 60 Hz

A

Dimensions in inches

XME A3

NEMA Premium®

3PT9 C UL US LISTED FOR SAFE AREA

C SA US Energy Verified

MADE IN BRAZIL

MAT: 14799195 CC029A
W01.TE0IC0X0X
MODEL 00236ET3E56C-S
24AUG2022 B/N:

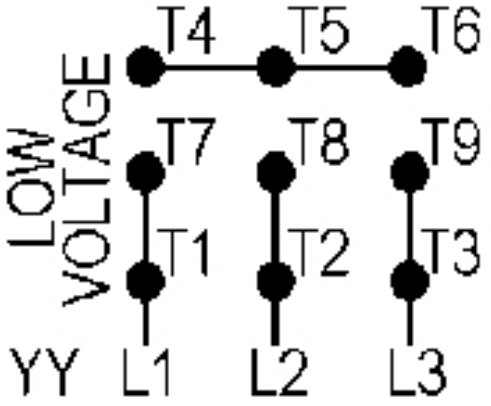
For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)
CT 2:1/VT 1000:1

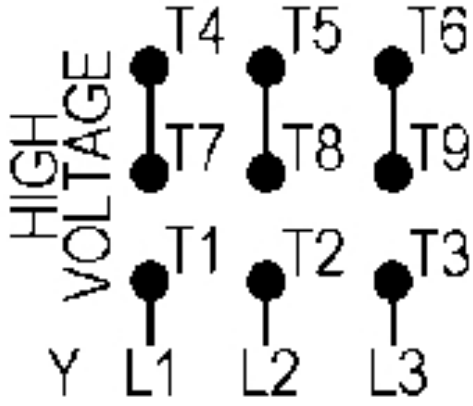
PH 3	Hz 60	HP	2.0
FR 56HC		kW	1.5
DUTY CONT.		V	230/460
ALT 1000 m.a.s.l		A	4.94/2.47
INS CL F ΔT 80K	IP55	SFA	5.68/2.84
AMB 40°C	DES B	SF	1.15
ENCL TEFC	CODE L	PF	0.89
USABLE @ 208V 5.46A SF1.00		RPM	3520
		NEMA NOM. EFF	85.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.15
5.94-5.23/2.97-2.77A 2875RPM EFF 83.3% (IE2) IEC 60034-1

For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6204-ZZ	ODE 6202-ZZ	MOBIL POLYREX EM	





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 THE ROTATION

WARNING: Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.

AVERTISSEMENT: Le moteur doit être mis à la terre conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.