

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : Automation Direct																			
Product line : Premium Efficiency Three-Phase	Product code : 14798674 Catalog # : 00156ET3E56C-S																		
Frame : 56C Output : 1.5 HP (1.1 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 230/460 V Rated current : 3.74/1.87 A L. R. Amperes : 34.0/17.0 A LRC : 9.1x(Code L) No load current : 1.72/0.859 A Rated speed : 3520 rpm Slip : 2.22 % Rated torque : 2.24 ft.lb Locked rotor torque : 229 % Breakdown torque : 300 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 0.1023 sq.ft.lb Design : B	Locked rotor time : 30s (cold) 17s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 68.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 33.1 lb																		
<table border="1"> <tr> <td>Output</td> <td>25%</td> <td>50%</td> <td>75%</td> <td>100%</td> </tr> <tr> <td>Efficiency (%)</td> <td>78.4</td> <td>80.0</td> <td>82.5</td> <td>84.0</td> </tr> <tr> <td>Power Factor</td> <td>0.44</td> <td>0.71</td> <td>0.82</td> <td>0.88</td> </tr> </table>	Output	25%	50%	75%	100%	Efficiency (%)	78.4	80.0	82.5	84.0	Power Factor	0.44	0.71	0.82	0.88	Foundation loads Max. traction : 71 lb Max. compression : 104 lb			
Output	25%	50%	75%	100%															
Efficiency (%)	78.4	80.0	82.5	84.0															
Power Factor	0.44	0.71	0.82	0.88															
<table border="1"> <tr> <td></td> <td style="text-align: center;"><u>Drive end</u></td> <td style="text-align: center;"><u>Non drive end</u></td> </tr> <tr> <td>Bearing type :</td> <td style="text-align: center;">6204 ZZ</td> <td style="text-align: center;">6202 ZZ</td> </tr> <tr> <td>Sealing :</td> <td style="text-align: center;">V'Ring</td> <td style="text-align: center;">Without Bearing Seal</td> </tr> <tr> <td>Lubrication interval :</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lubricant amount :</td> <td style="text-align: center;">-</td> <td style="text-align: center;">-</td> </tr> <tr> <td>Lubricant type :</td> <td colspan="2" style="text-align: center;">Mobil Polyrex EM</td> </tr> </table>			<u>Drive end</u>	<u>Non drive end</u>	Bearing type :	6204 ZZ	6202 ZZ	Sealing :	V'Ring	Without Bearing Seal	Lubrication interval :	-	-	Lubricant amount :	-	-	Lubricant type :	Mobil Polyrex EM	
	<u>Drive end</u>	<u>Non drive end</u>																	
Bearing type :	6204 ZZ	6202 ZZ																	
Sealing :	V'Ring	Without Bearing Seal																	
Lubrication interval :	-	-																	
Lubricant amount :	-	-																	
Lubricant type :	Mobil Polyrex EM																		
Notes USABLE @208V 4.13A SF 1.00 SFA 4.13A																			
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

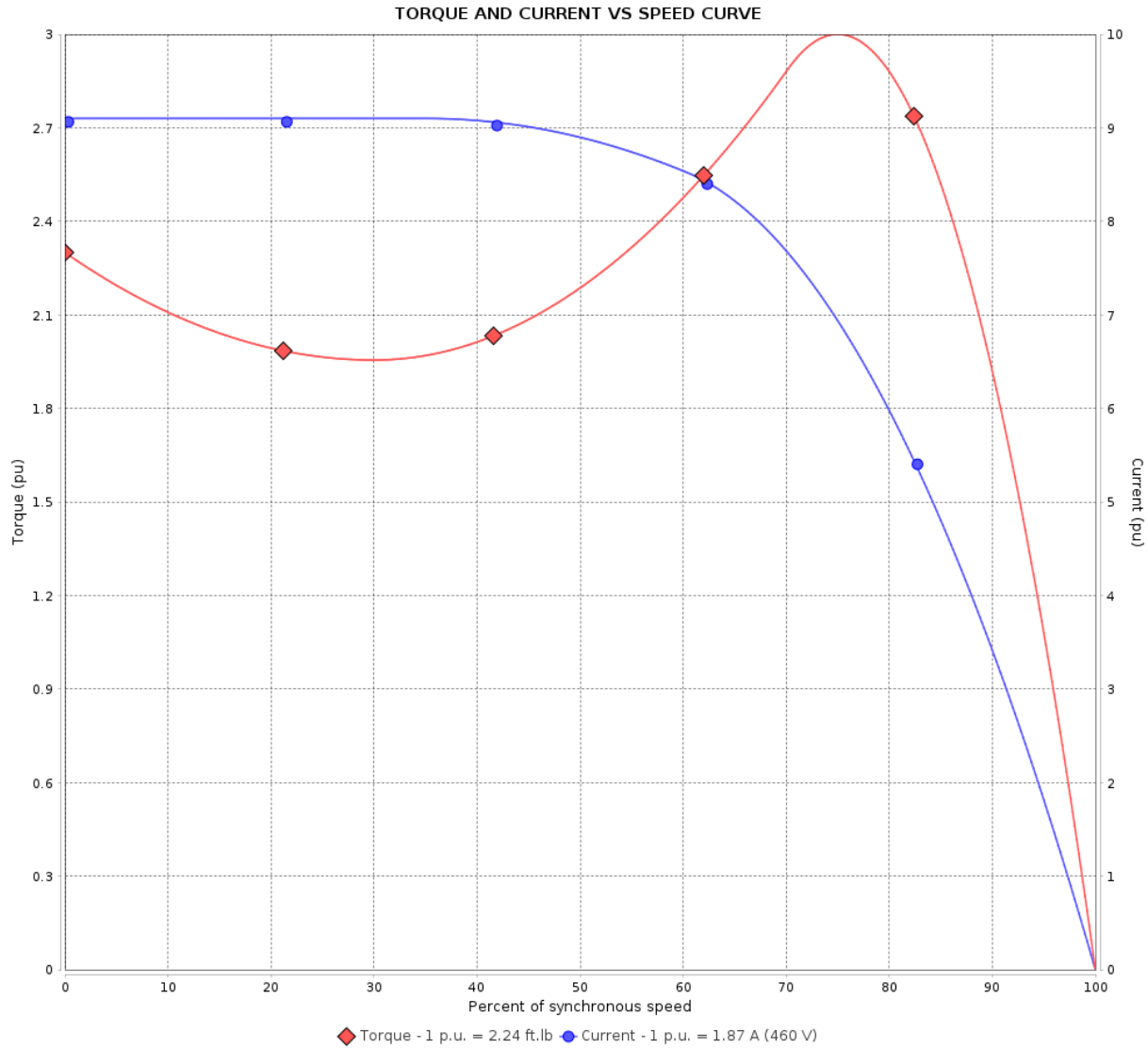
Product line : Premium Efficiency Three-Phase

Product code :

14798674

Catalog # :

00156ET3E56C-S



Performance : 230/460 V 60 Hz 2P

Rated current	: 3.74/1.87 A	Moment of inertia (J)	: 0.1023 sq.ft.lb
LRC	: 9.1	Duty cycle	: Cont.(S1)
Rated torque	: 2.24 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3520 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		2 / 5		
Date	23/08/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

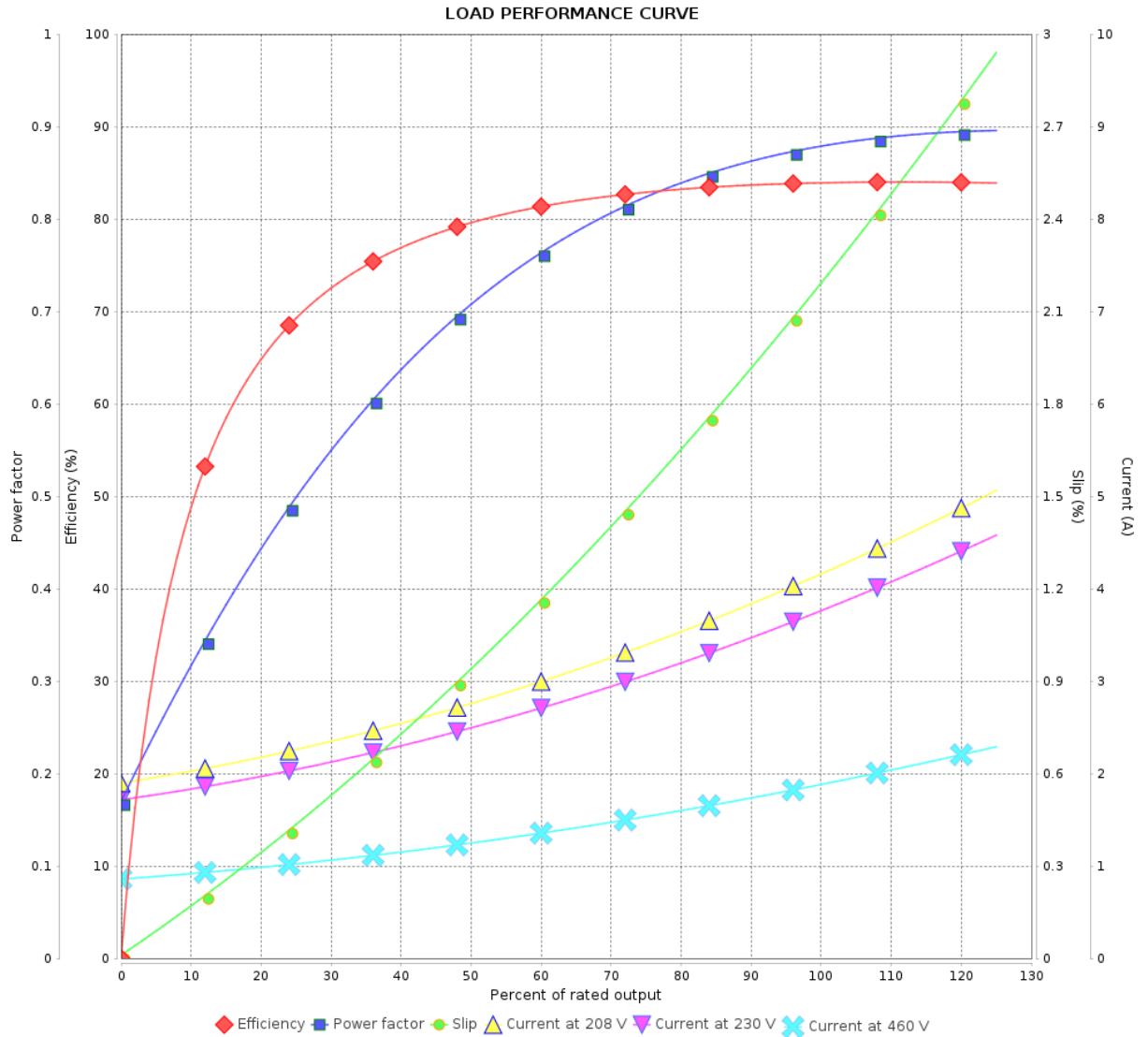


Customer : Automation Direct

Product line : Premium Efficiency Three-Phase

Product code :
Catalog # :

14798674
00156ET3E56C-S



Performance : 230/460 V 60 Hz 2P

Rated current : 3.74/1.87 A
 LRC : 9.1
 Rated torque : 2.24 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 3520 rpm

Moment of inertia (J) : 0.1023 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
			3 / 5	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

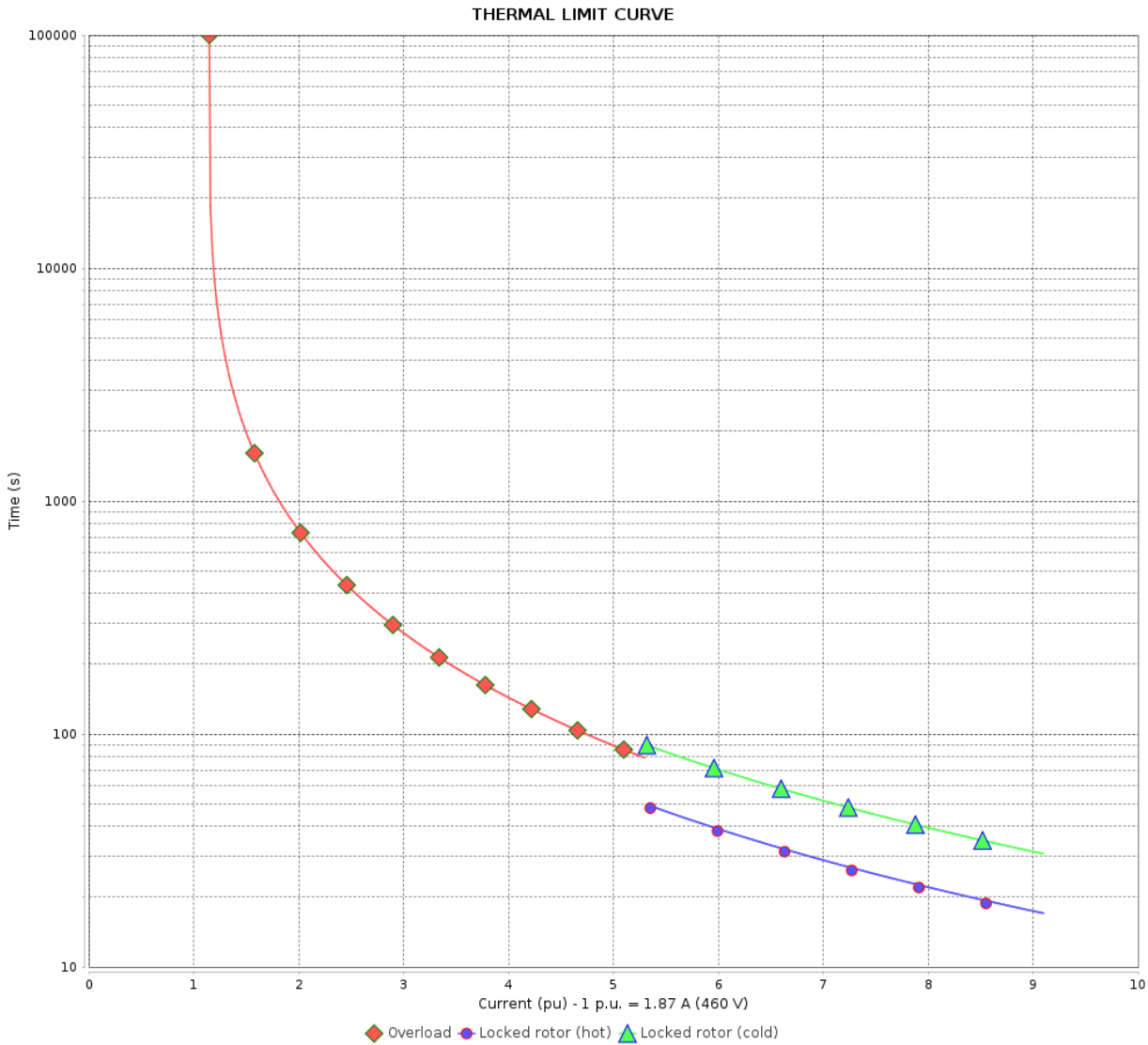
Product line : Premium Efficiency Three-Phase

Product code :

14798674

Catalog # :

00156ET3E56C-S



Performance : 230/460 V 60 Hz 2P

Rated current : 3.74/1.87 A
 LRC : 9.1
 Rated torque : 2.24 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 300 %
 Rated speed : 3520 rpm

Moment of inertia (J) : 0.1023 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

Heating constant

Cooling constant

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

VFD OPERATION CURVE

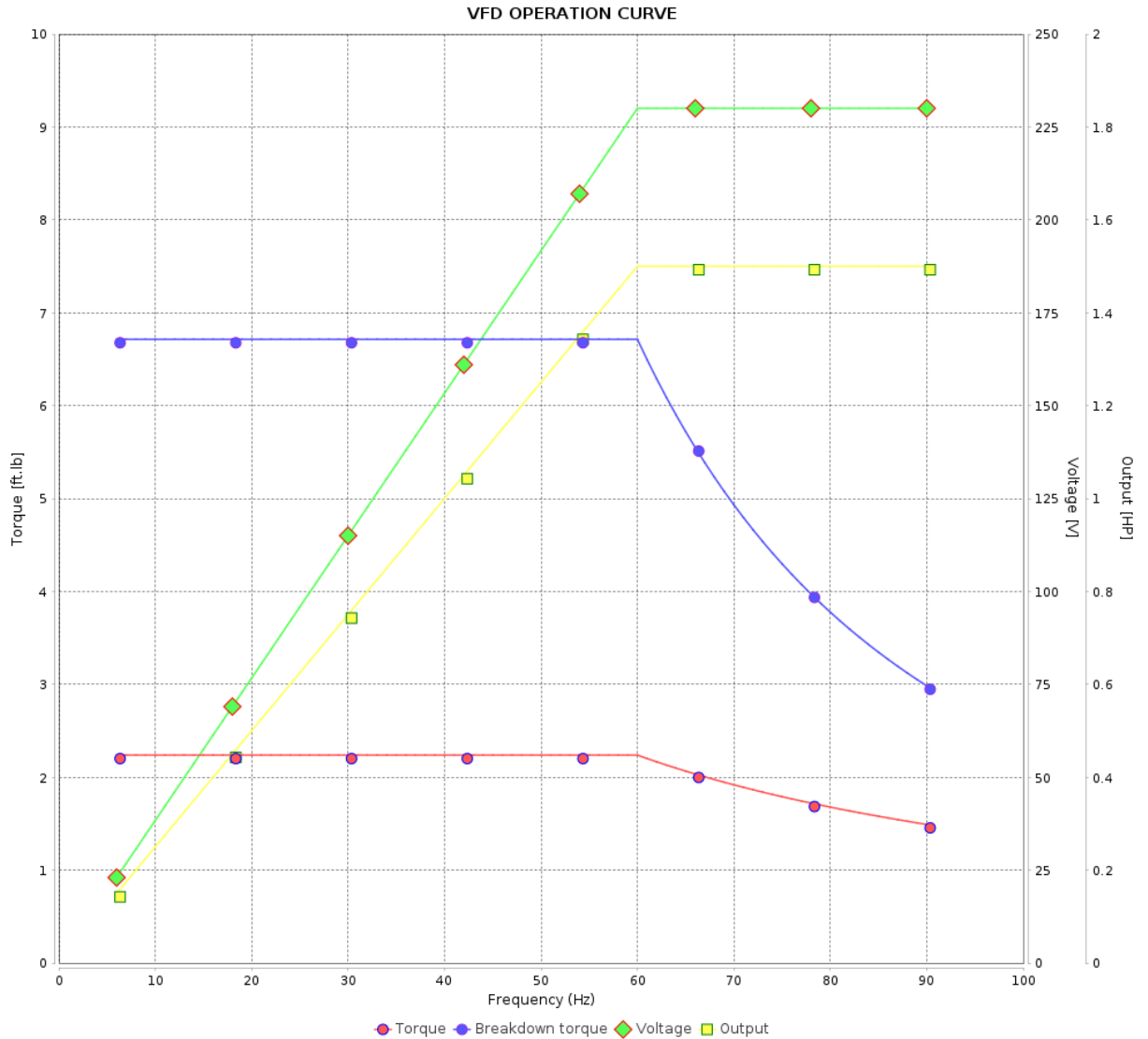
Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

Product line : Premium Efficiency Three-Phase

Product code : 14798674
Catalog # : 00156ET3E56C-S

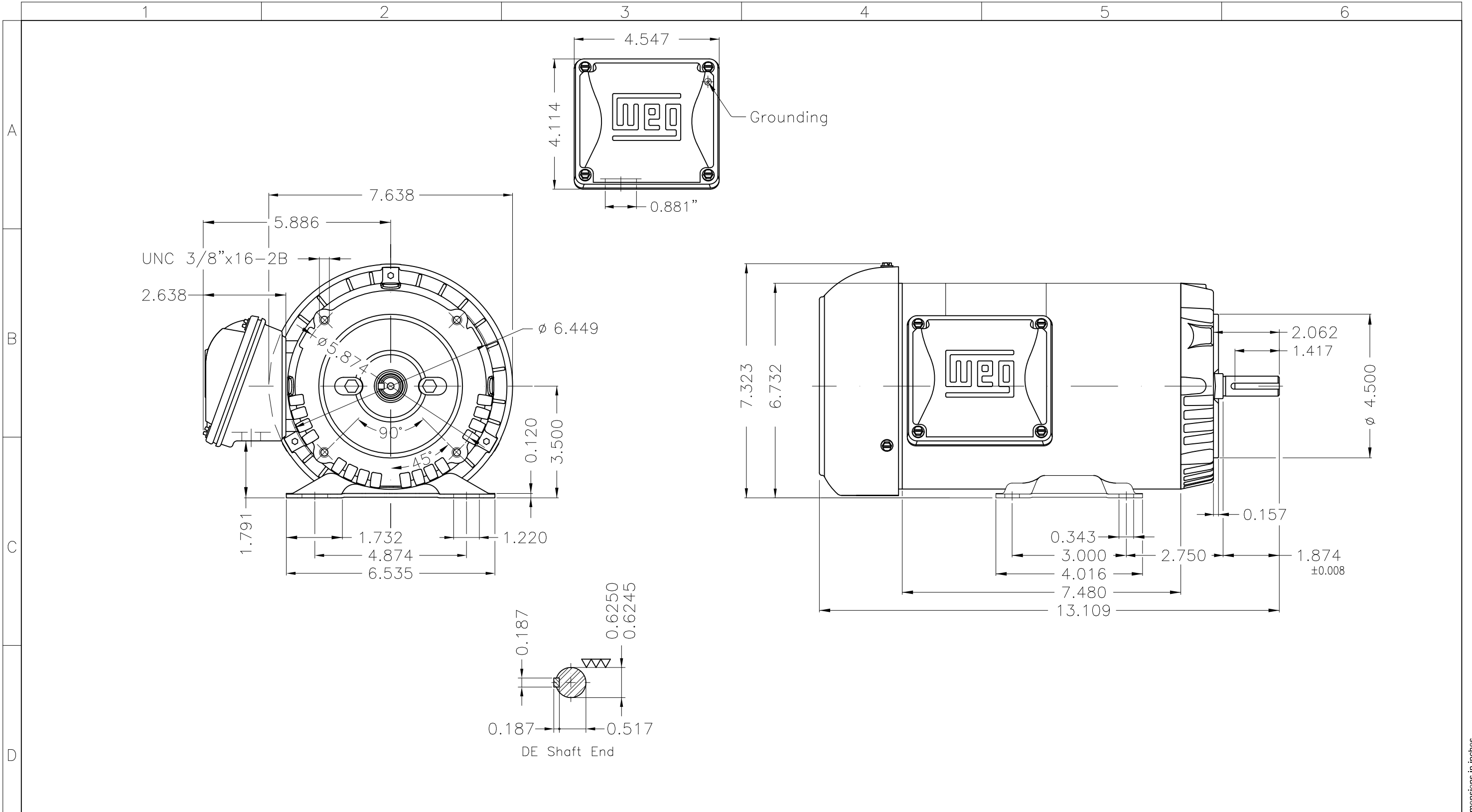


Performance : 230/460 V 60 Hz 2P

Rated current : 3.74/1.87 A
LRC : 9.1
Rated torque : 2.24 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 300 %
Rated speed : 3520 rpm

Moment of inertia (J) : 0.1023 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				



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		WDD		
CHECKED		FRAME 56C IP55 TEFC			WDD		WEG		
RELEASED					SHEET		1 / 1		
REL DT.		WMO	Jaragua do Sul	Product Engineering					

1.5 HP 02 Poles 60 Hz



NEMA
Premium

®



3PT9

US LISTED
FOR SAFE AREA



Energy Verified

MADE IN BRAZIL

MAT: 14798674 CC029A
W01.TE0IC0X0X
MODEL 00156ET3E56C-S
23AUG2022 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 1.5
FR 56C		KW 1.1
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 3.74/1.87
INS CL F AT 80K	IP55	SFA 4.30/2.15
AMB 40°C	DES B	SF 1.15
ENCL TEFC	CODE L	PF 0.88
USABLE @ 208V 4.14A		RPM 3520
SF1.00		NEMA NOM. EFF 84.0%

ALTERNATE RATING: 1.5HP	50Hz	190-220/380-415V	SF1.15
4.44-3.90/2.22-2.07A	2895RPM	EFF 82.9%	(IE3) 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.

