

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer	: Automation Direct			
Product line	: Premium Efficiency Three-Phase		Product code :	15754022
			Catalog # :	.5018NT3FVD56C-S
Frame	: 56CZ		Locked rotor time	: 34s (cold) 19s (hot)
Output	: 0.5 HP (0.37 kW)		Temperature rise	: 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	: 1.97/0.986 A		Protection degree	: IP55
L. R. Amperes	: 17.1/8.58 A		Cooling method	: IC410 - TENV
LRC	: 8.7x(Code P)		Mounting	: F-1
No load current	: 1.52/0.760 A		Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1775 rpm		Starting method	: Direct On Line
Slip	: 1.39 %		Approx. weight <sup>3</sup>	: 12.6 kg
Rated torque	: 2.01 Nm			
Locked rotor torque	: 330 %			
Breakdown torque	: 500 %			
Insulation class	: H			
Service factor	: 1.00			
Moment of inertia (J)	: 0.0033 kgm <sup>2</sup>			
Output	25%	50%	75%	100%
Efficiency (%)	0.000	74.0	75.5	78.5
Power Factor	0.00	0.41	0.50	0.60
			Foundation loads	
			Max. traction	: 262 N
			Max. compression	: 385 N
			<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6204 ZZ	6203 ZZ	
Sealing	:	V'Ring	Without Bearing Seal	
Lubrication interval	:	0 h	0 h	
Lubricant amount	:	0 g	0 g	
Lubricant type	:	Mobil Polyrex EM		
Notes				
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
Performed by				
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## Three Phase Induction Motor - Squirrel Cage

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### Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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# TORQUE AND CURRENT VS SPEED CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer : Automation Direct

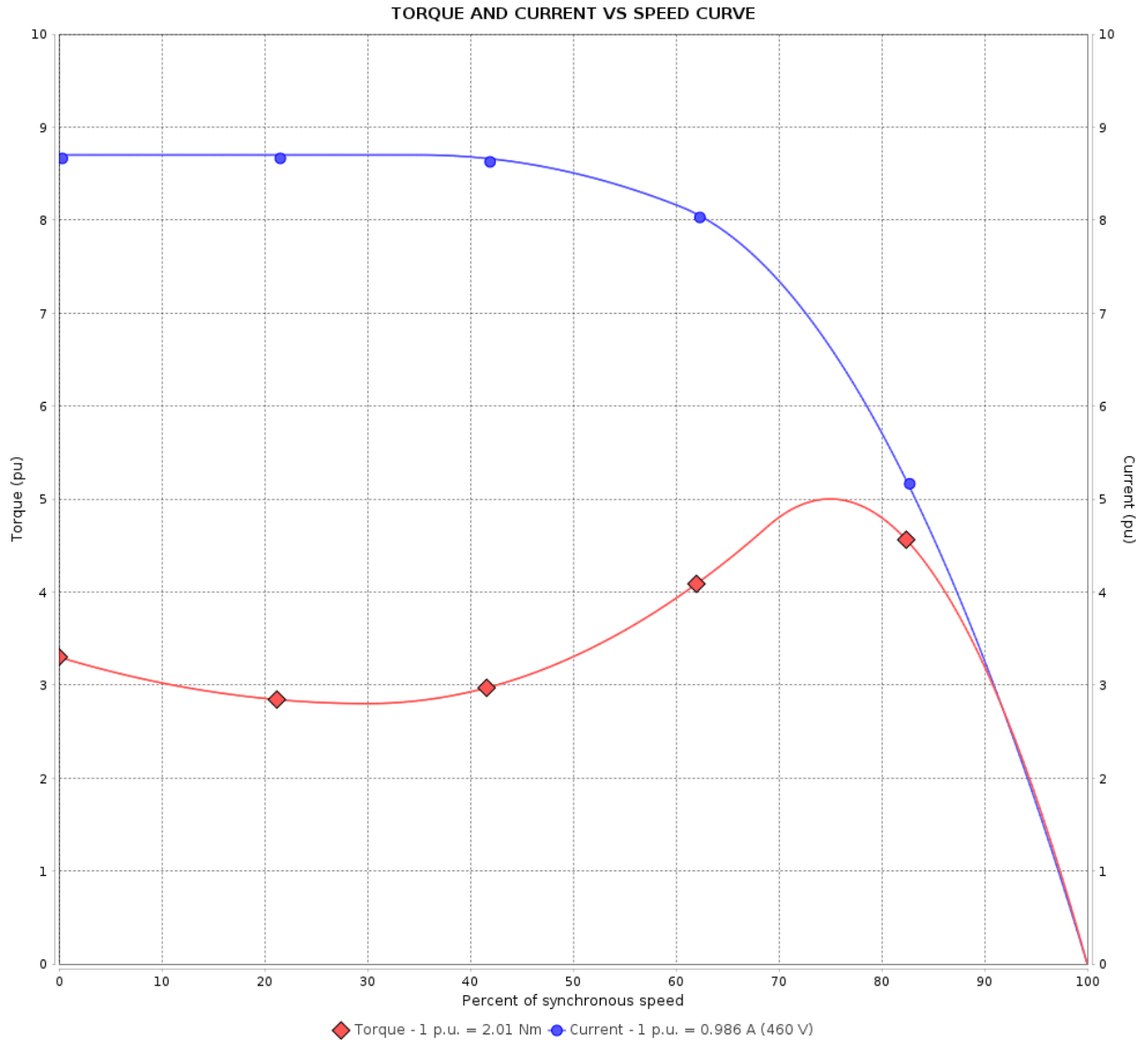
Product line : Premium Efficiency Three-Phase

Product code :

15754022

Catalog # :

.5018NT3FVD56C-S



Performance : 230/460 V 60 Hz 4P

Rated current : 1.97/0.986 A  
 LRC : 8.7  
 Rated torque : 2.01 Nm  
 Locked rotor torque : 330 %  
 Breakdown torque : 500 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 0.0033 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : H  
 Service factor : 1.00  
 Temperature rise : 80 K

Locked rotor time : 34s (cold) 19s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

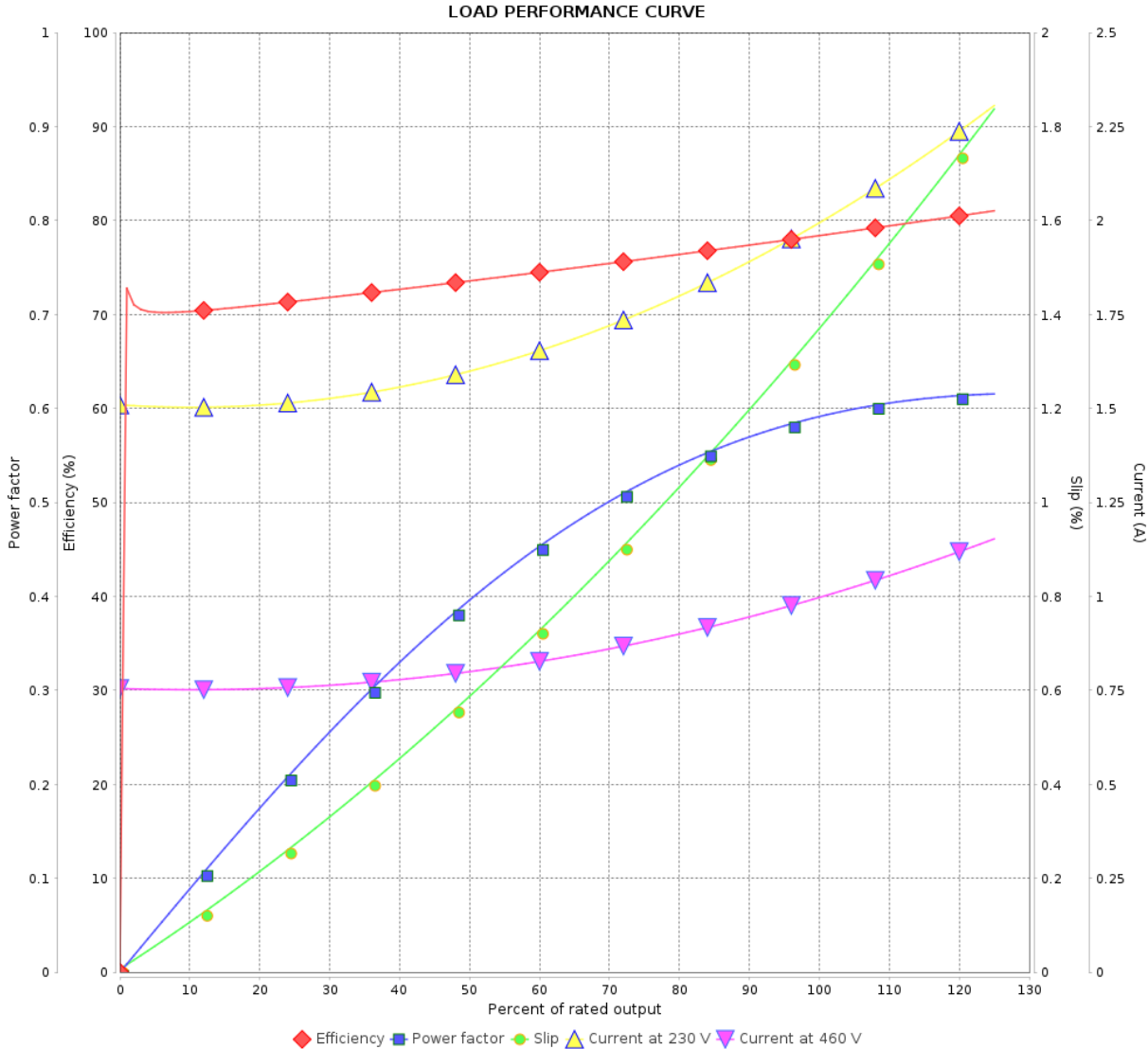
Product line : Premium Efficiency Three-Phase

Product code :

15754022

Catalog # :

.5018NT3FVD56C-S



Performance : 230/460 V 60 Hz 4P

Rated current : 1.97/0.986 A  
 LRC : 8.7  
 Rated torque : 2.01 Nm  
 Locked rotor torque : 330 %  
 Breakdown torque : 500 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 0.0033 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : H  
 Service factor : 1.00  
 Temperature rise : 80 K

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

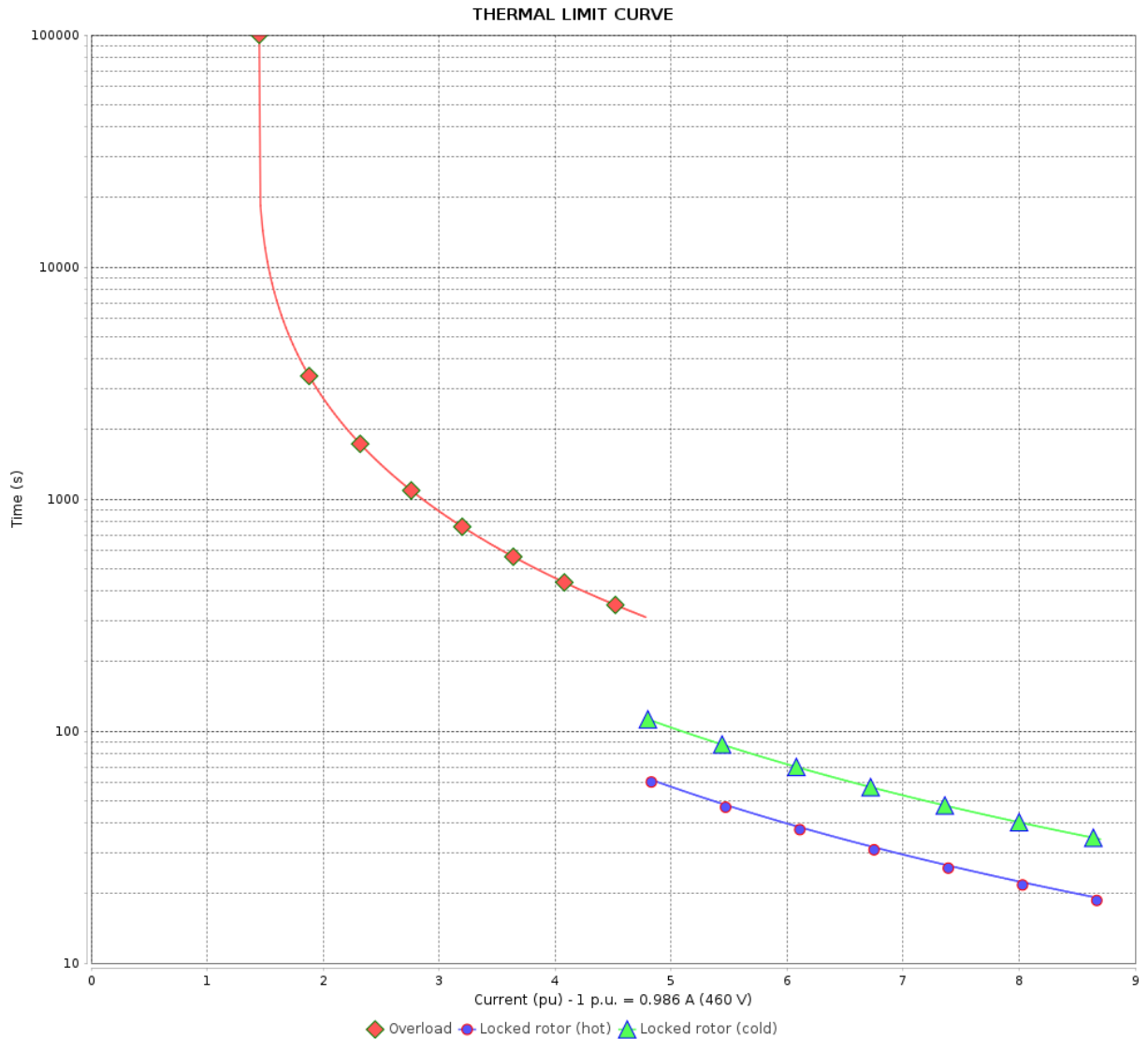
Product line : Premium Efficiency Three-Phase

Product code :

15754022

Catalog # :

.5018NT3FVD56C-S



Performance : 230/460 V 60 Hz 4P

Rated current : 1.97/0.986 A  
 LRC : 8.7  
 Rated torque : 2.01 Nm  
 Locked rotor torque : 330 %  
 Breakdown torque : 500 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 0.0033 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : H  
 Service factor : 1.00  
 Temperature rise : 80 K

Heating constant

Cooling constant

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Date				
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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Automation Direct

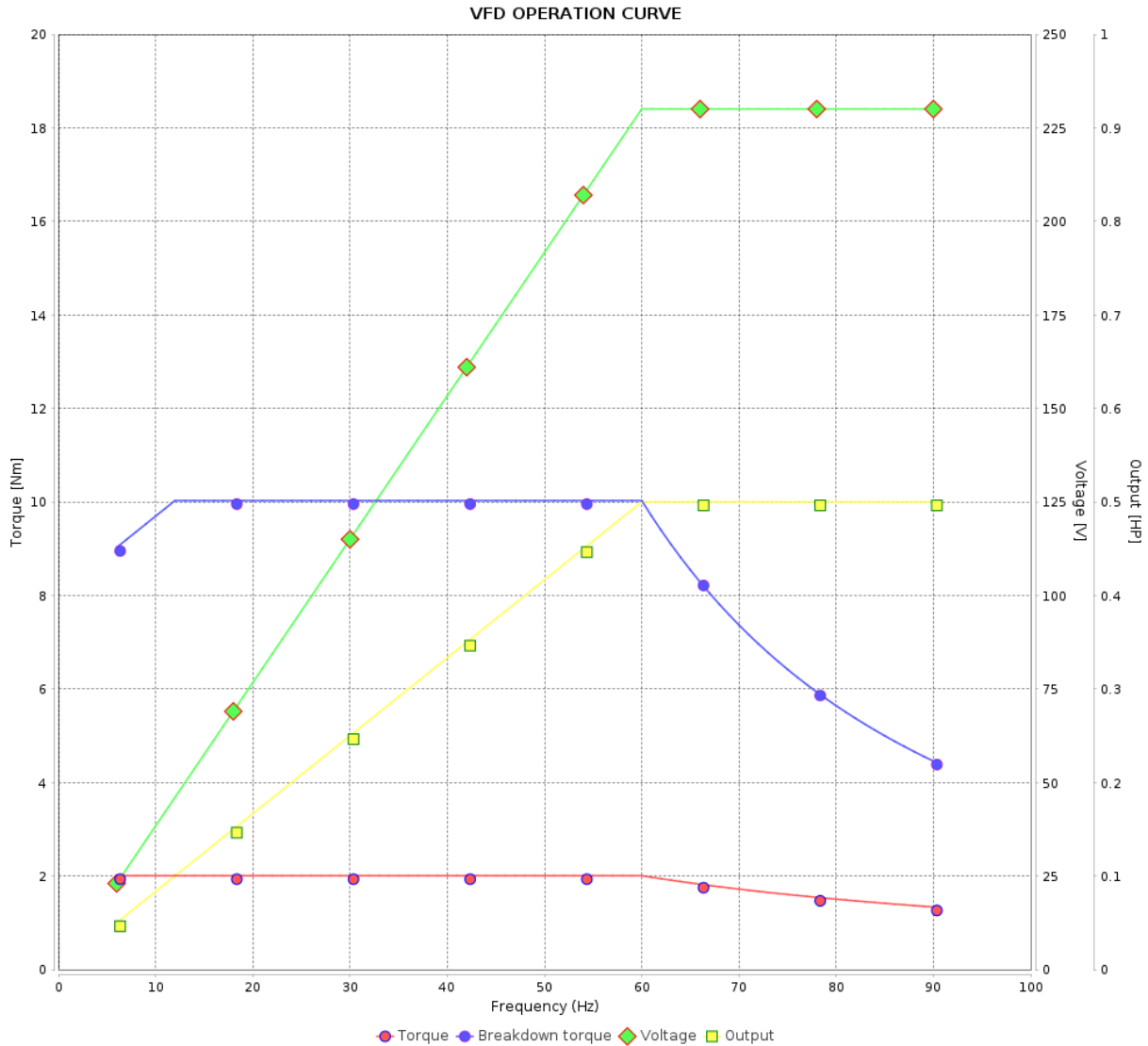
Product line : Premium Efficiency Three-Phase

Product code :

15754022

Catalog # :

.5018NT3FVD56C-S



Performance : 230/460 V 60 Hz 4P

Rated current : 1.97/0.986 A  
 LRC : 8.7  
 Rated torque : 2.01 Nm  
 Locked rotor torque : 330 %  
 Breakdown torque : 500 %  
 Rated speed : 1775 rpm

Moment of inertia (J) : 0.0033 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : H  
 Service factor : 1.00  
 Temperature rise : 80 K

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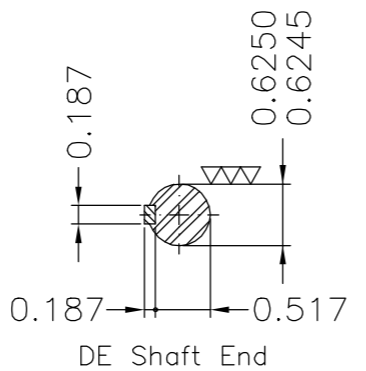
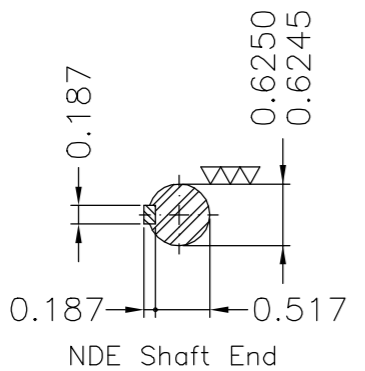
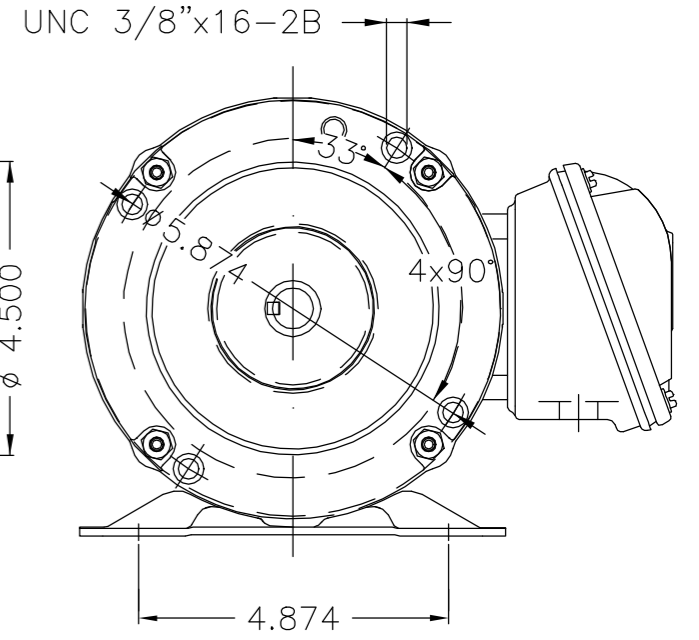
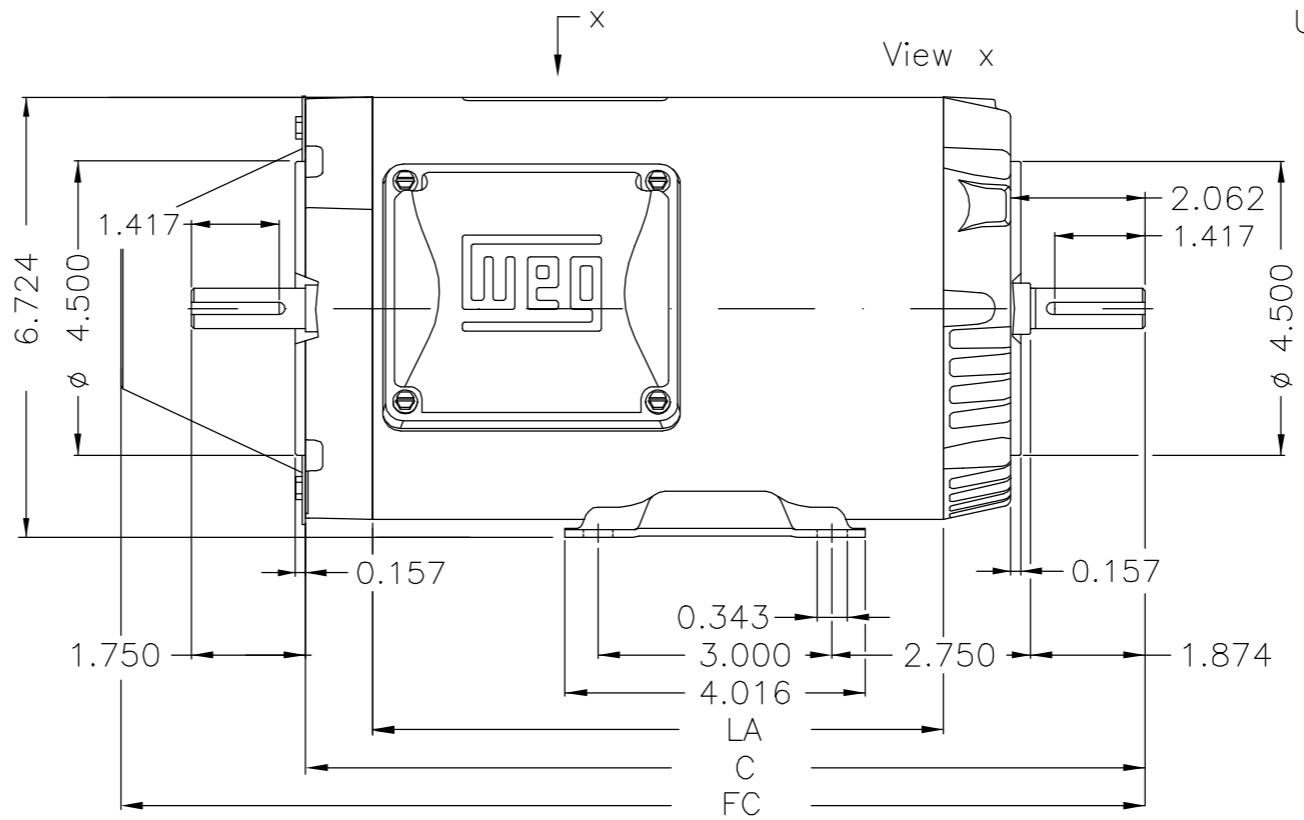
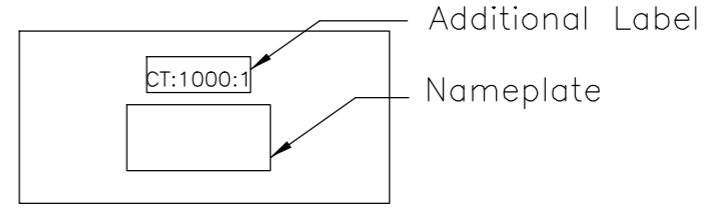
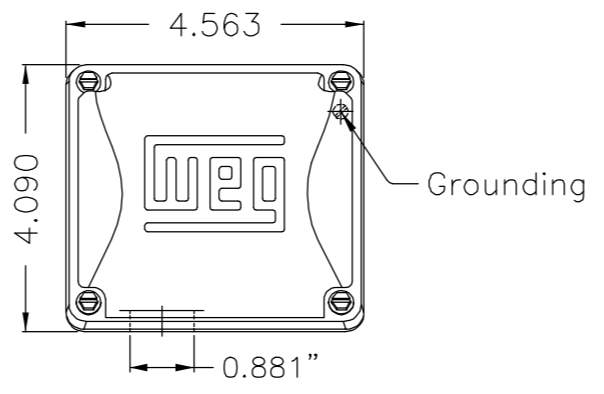
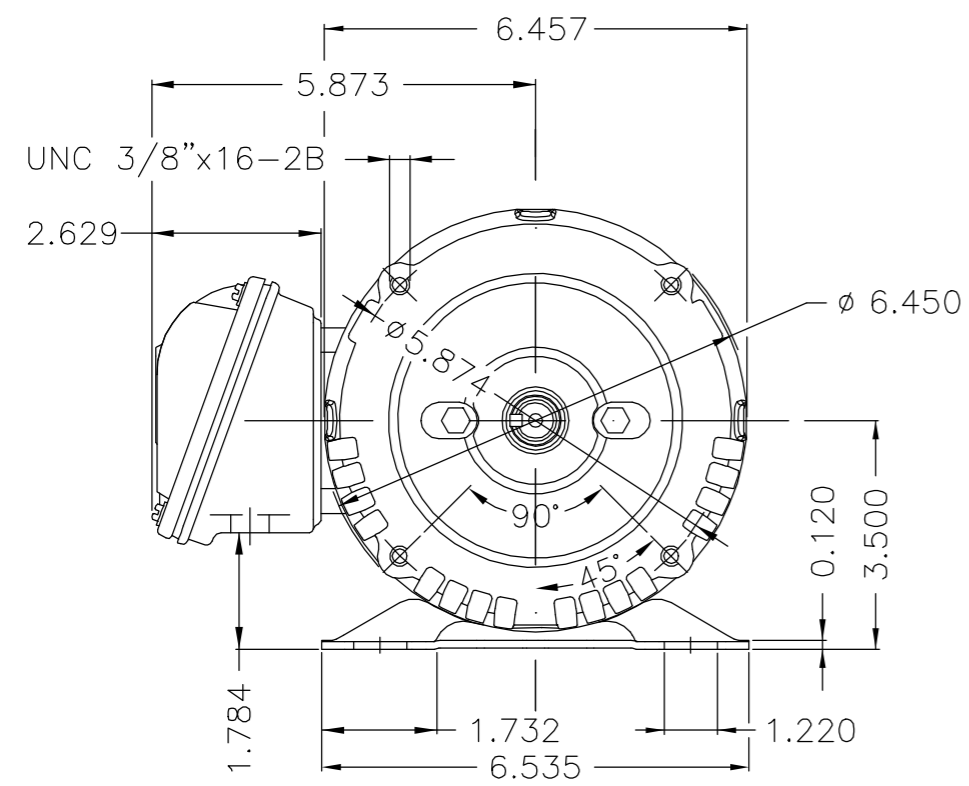
EJE/SHAFT	
ESTÁNDAR/STANDARD	
OPCIONAL/OPTIONAL	
ESPECIAL/SPECIAL	X

Dimensões em polegada  
Dimensions in inches

**PRELIMINARY DOCUMENT**  
Not to be used for installation purposes.

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

A  
B  
C  
D  
E



Velocidad maxima segura:6000 rpm/Max safe speed:6000 rpm					
Apto para trabajar para VFD 1000: 1 CT / Suitable to work for VFD 1000:1 CT					
Placa de identificación adicional para uso del inversor / Nameplate for VFD motor					
Termostato 155°C - Desconexión / Thermal protection to switch off - thermostat 155°C					
Material del eje - SAE/ABNT 1040/45 / Shaft material - SAE/ABNT 1040/45					
Vedación - Anillos V Ring / Sealing - V ring					
Dren automático de goma / Automatic rubber drain plug					
Color Munsell N 1 negro mate / Color Munsell N 1 matte black					
Plan de pintura 207N / Painting plan 207N					
Forma constructiva F-1/B34R(D) / Mounting F-1/B34R(D)					
<b>WEG ELECTRIC CORPORATION - WEC</b>					

500002053159	According to claim 419068888	CAZARES	ARISTAM	ARISTAM	11.01.2022	04		
500001997447	According to claim 418397666	ALVAREZZ	MORALESR	MORALESR	13.09.2021	03		
ECM	LOC	SUMMARY OF MODIFICATIONS		EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	CESTRELLA	THREE PHASE MOTOR CLOSED ROLLED STEEL		10006592225		000   05		
CHECKED	ALDOV	FRAME 56C IP55 TENV		000   05				
RELEASED	ALDOV							
REL DT	07.05.2019	WMX	Huehuetoca	Product Engineering	SHEET	1 / 1		

					LA	C	FC	
0.75 HP	04 Poles	60Hz	415447108		7.086	11.197	14.001	C
0.50 HP	04 Poles	60Hz	415447107		6.693	10.803	13.607	B
0.33 HP	04 Poles	60Hz	415447106		5.905	10.015	12.819	A

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RELEASED

ZME A3



**NEMA**  
**Premium**



3PT9



MADE IN MEXICO

**MAT: 15754022**

**W01.TE0IC0X0X**

**MODEL .5018NT3FVD56C-S**

**05MAI2021 B/N:**

PH 3	Hz 60	HP 0.50
FR 56CZ		KW 0.37
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 1.97/0.986
INS CL H ΔT 80K	IP55	SFA
AMB 40°C	DES	SF 1.00
ENCL TENV	CODE P	PF 0.60
		RPM 1775
		NEMA NOM. EFF 78.5%

Electric Motor

DE 6204-ZZ	ODE 6203-ZZ	MOBIL POLYREX EM
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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.

