

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	12648444			
Catalog # :	00712OT3H254T-S			
Frame : 254/6T Output : 7.5 HP (5.5 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 575 V Rated current : 8.16 A L. R. Amperes : 41.6 A LRC : 5.1x(Code F) No load current : 4.29 A Rated speed : 1175 rpm Slip : 2.08 % Rated torque : 33.5 ft.lb Locked rotor torque : 200 % Breakdown torque : 229 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 2.00 sq.ft.lb Design : B	Locked rotor time : 66s (cold) 37s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Cooling method : IC01 - ODP Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 59.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 186 lb			
Output	25%    50%    75%    100%			
Efficiency (%)	88.2    88.5    90.2    90.2			
Power Factor	0.33    0.56    0.68    0.75			
Foundation loads				
Max. traction	: 276 lb			
Max. compression	: 463 lb			
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3			
Sealing	: Without Bearing Seal      Without Bearing Seal			
Lubrication interval	: 20000 h      20000 h			
Lubricant amount	: 13 g      8 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.				
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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



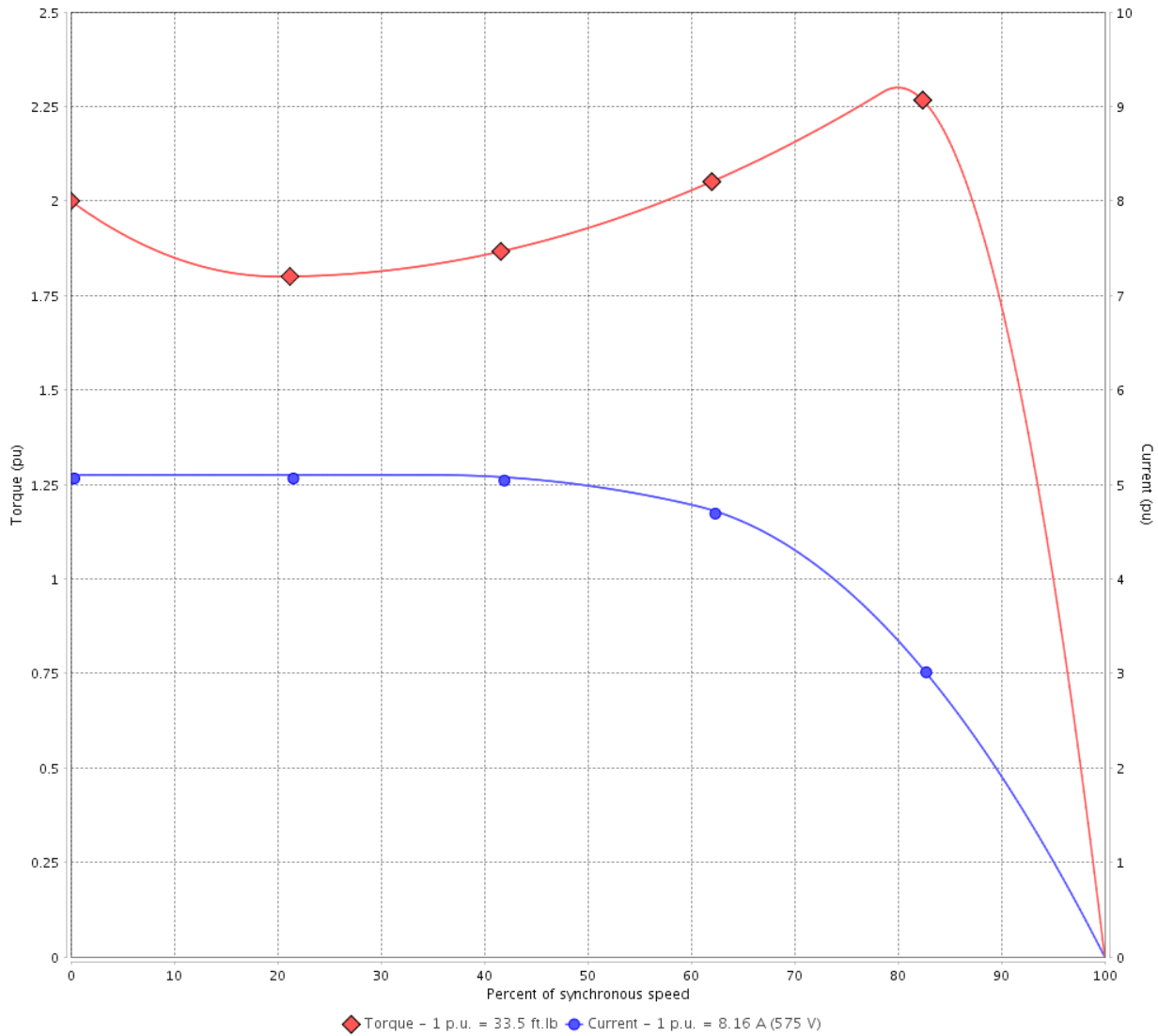
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12648444

Catalog # : 007120T3H254T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 6P

Rated current	: 8.16 A	Moment of inertia (J)	: 2.00 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 33.5 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Locked rotor time : 66s (cold) 37s (hot)

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

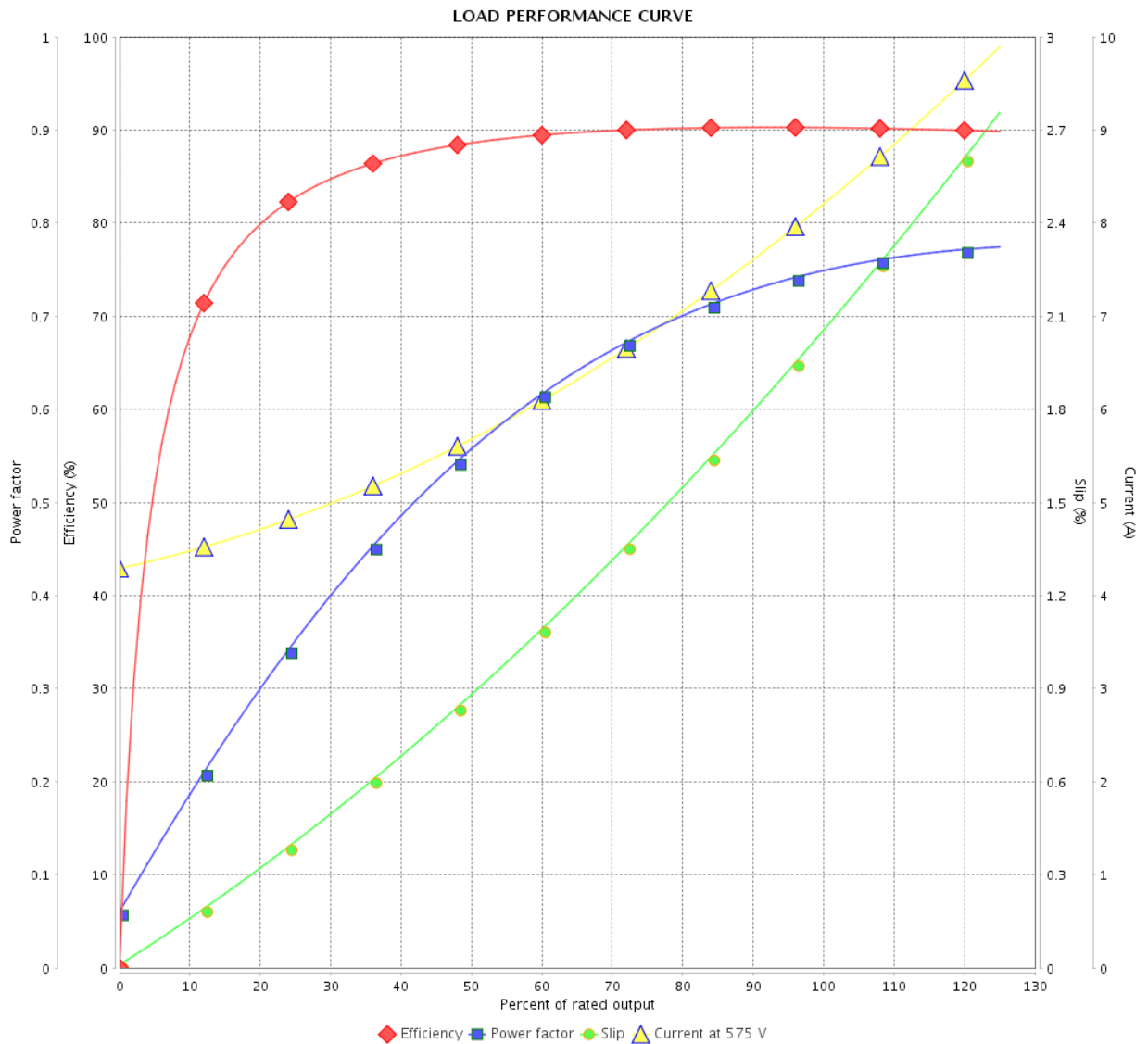


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12648444

Catalog # : 007120T3H254T-S



Performance : 575 V 60 Hz 6P

Rated current : 8.16 A  
 LRC : 5.1  
 Rated torque : 33.5 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 1175 rpm

Moment of inertia (J) : 2.00 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase  
Product code : 12648444  
Catalog # : 00712OT3H254T-S

Performance : 575 V 60 Hz 6P

Rated current	: 8.16 A	Moment of inertia (J)	: 2.00 sq.ft.lb
LRC	: 5.1	Duty cycle	: Cont.(S1)
Rated torque	: 33.5 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Heating constant

Cooling constant

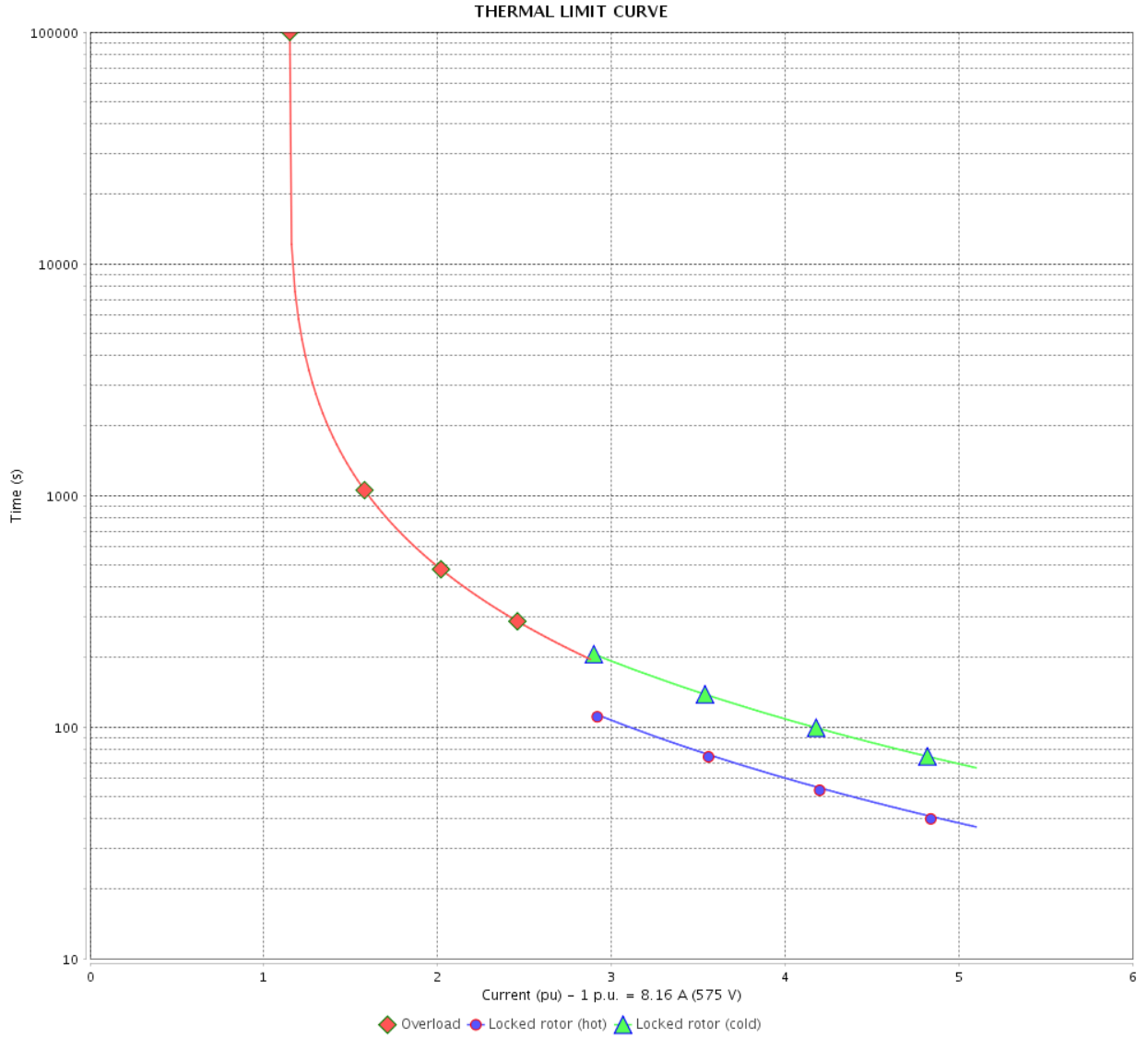
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



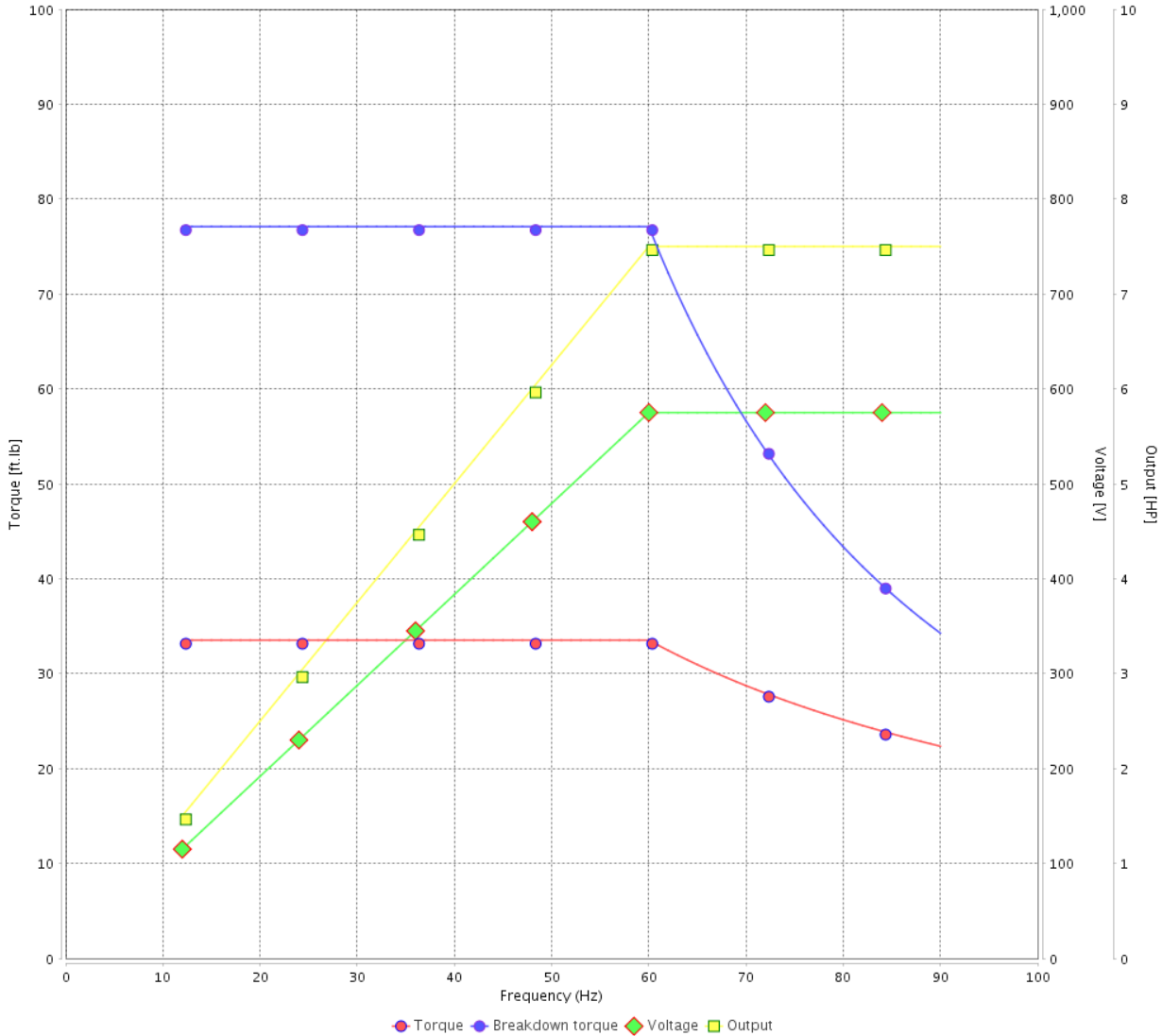
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12648444

Catalog # : 007120T3H254T-S

VFD OPERATION CURVE

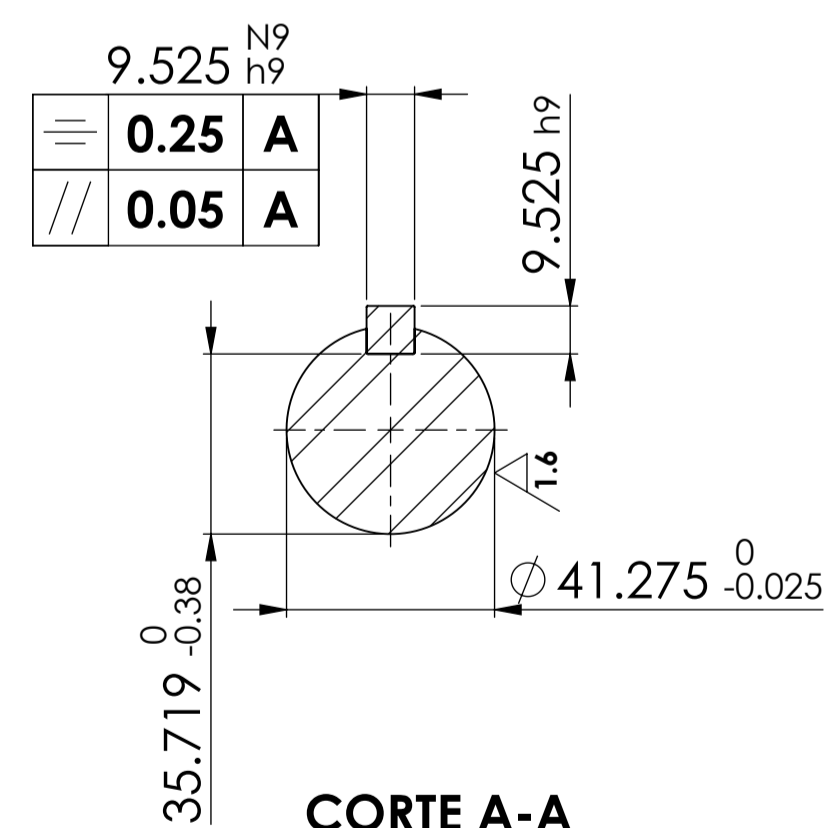
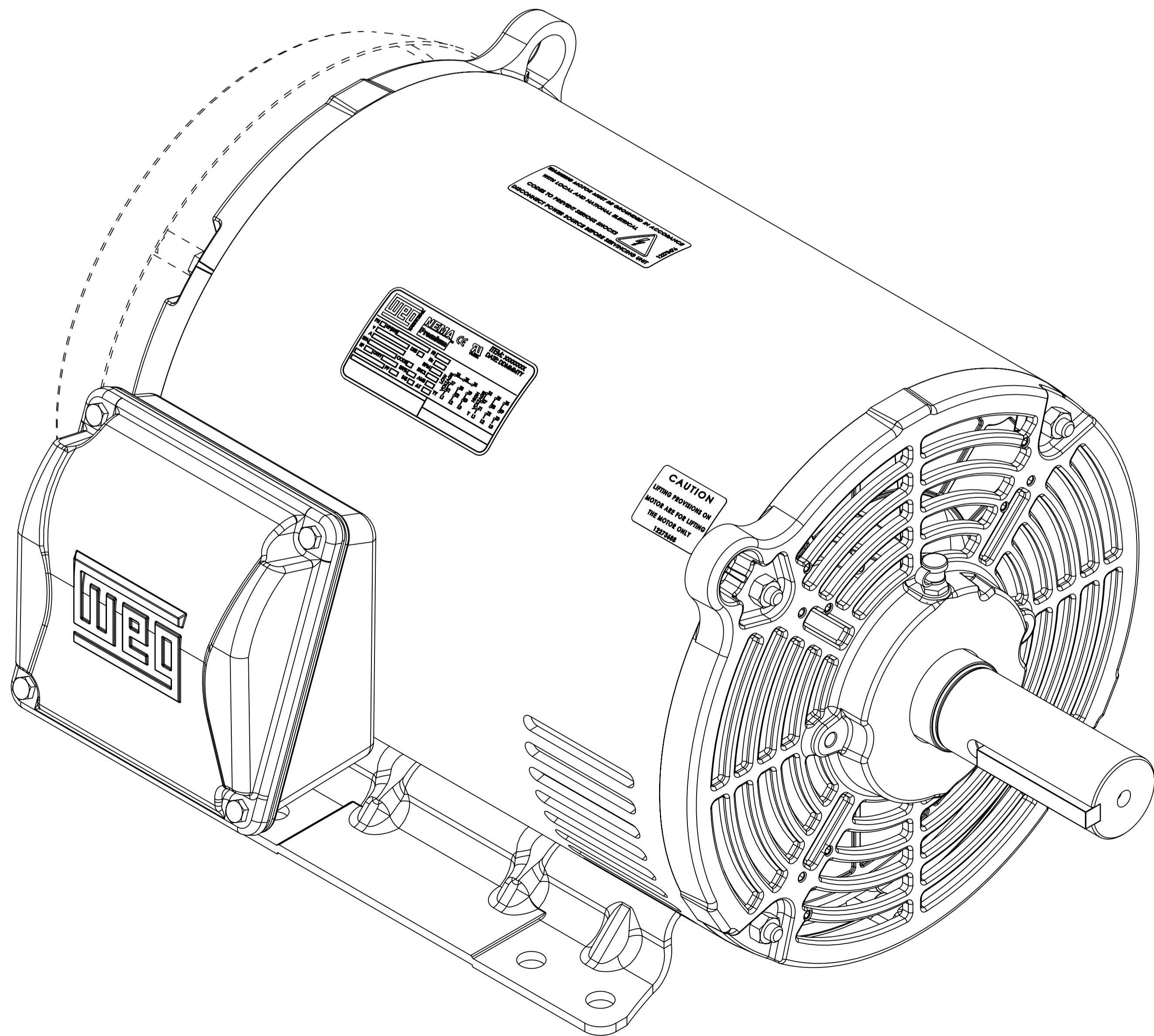
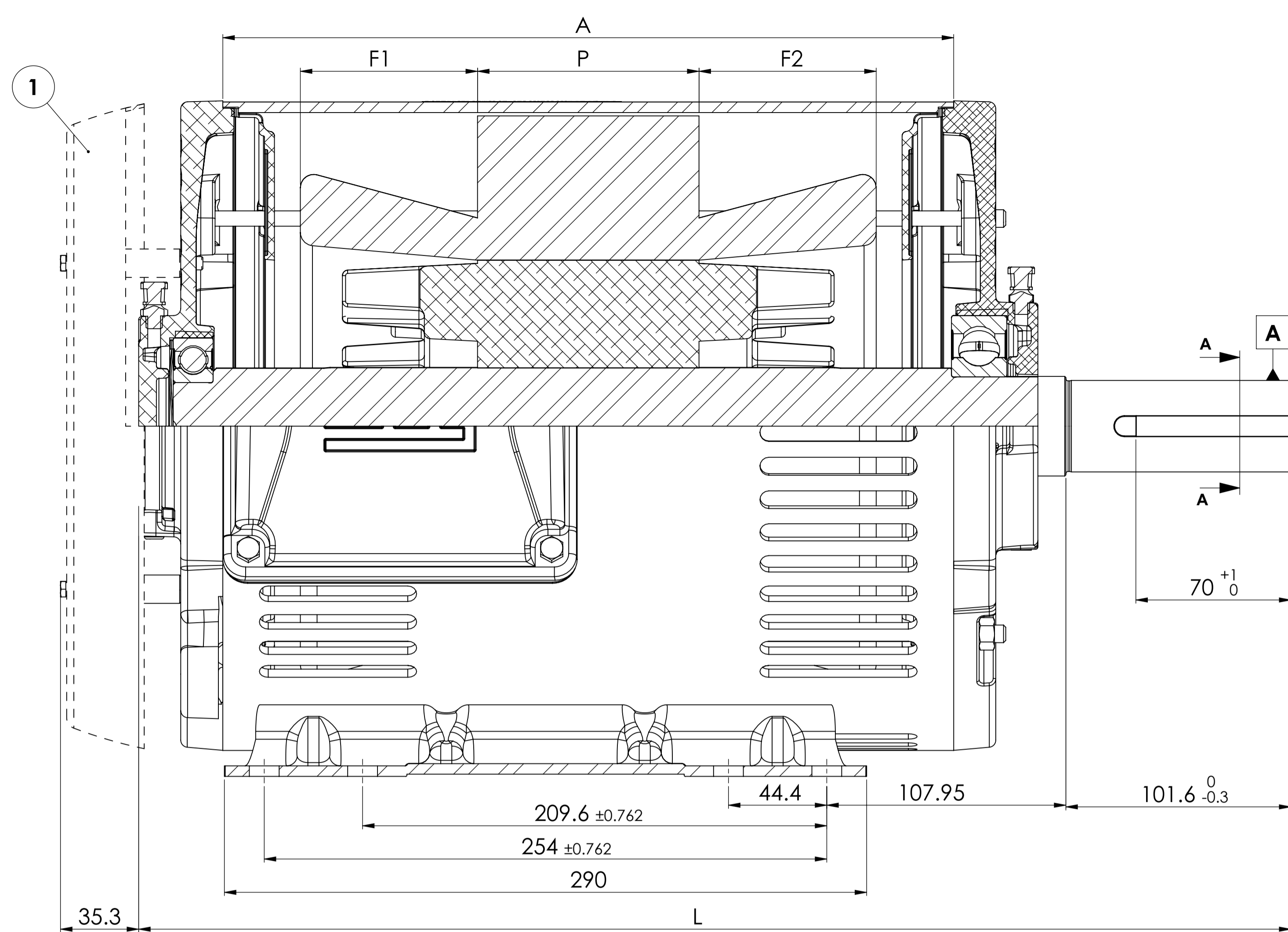
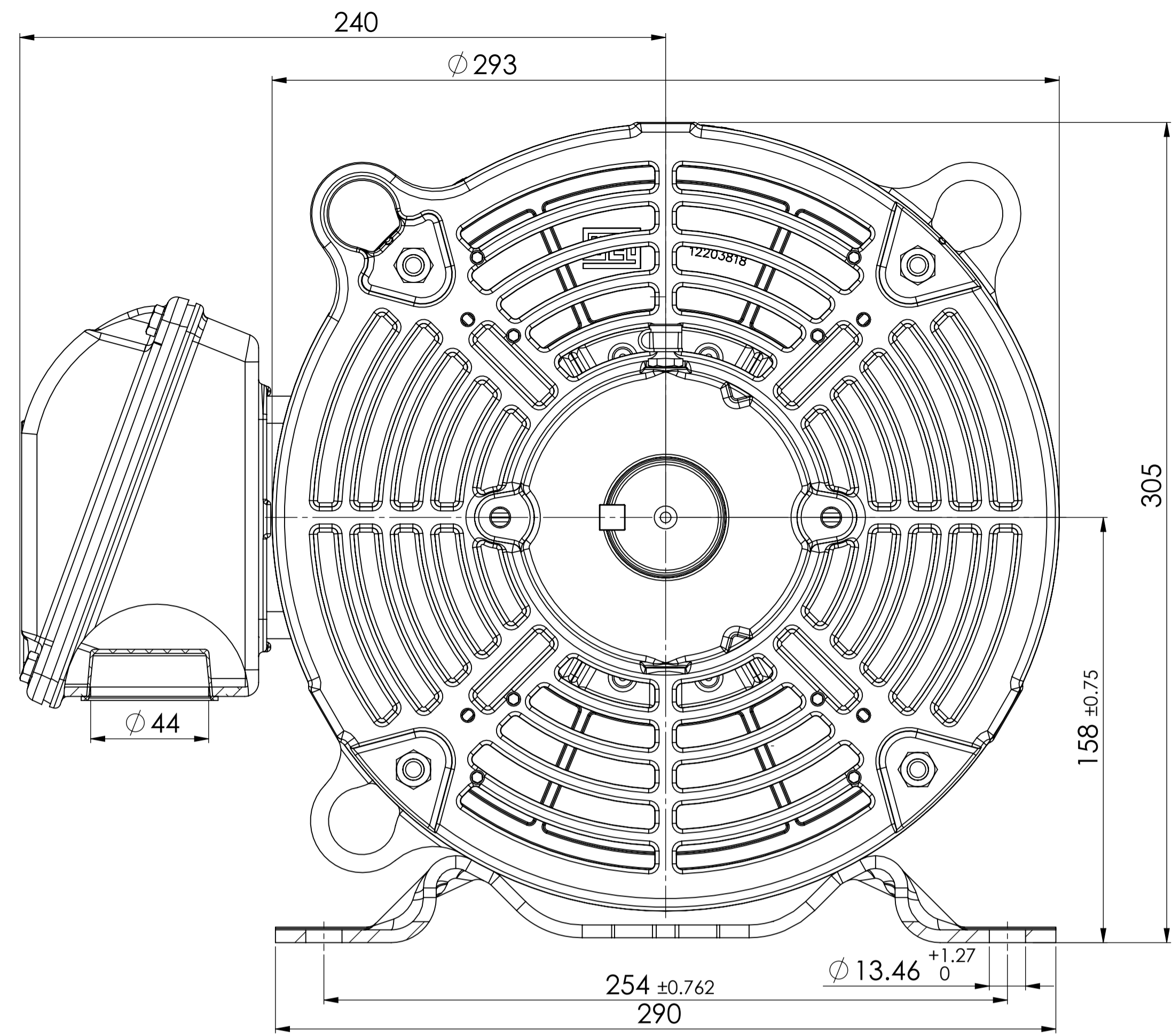


Performance : 575 V 60 Hz 6P

Rated current : 8.16 A  
 LRC : 5.1  
 Rated torque : 33.5 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 229 %  
 Rated speed : 1175 rpm

Moment of inertia (J) : 2.00 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Cabeça de Bobina	F1	F2
II	80	80
IV - VI	65	65

Cotas / Carcaça	330
A	330
P	80-150
L	520

1. SOMENTE QUANDO INDICADO NA LISTA TÉCNICA DO MOTOR

MASSA BRUTA/GROSS WEIGHT	MASSA LÍQUIDA/NET WEIGHT	ESCALA/SCALE	1:5
500001081712	REVISÃO NORMA CABEÇA BOBINA	JROPELATO	JHONATANP
500000886238	ALT. CONF. CLAIM 413416105	PMAUERBERG	ALISSON
ECM	LOC	RESUMO DE MODIFICAÇÕES	VERIFICADO
		SUMMARY OF MODIFICATIONS	CHECKED
EXEC	RAFAELLOPES	DIMENSIONAL 254 GDP TPA NORMAL	LIBERADO
VERIFICADO	JTOGNERI		RELEASED
LIBERADO	24.04.2013		000
DT LIBER/REL DT	24.04.2013	WMO	JARAGUÁ DO SUL
		DESENVOLVIMENTO DE PRODUTO	FOLHETA 1 / 1

**NEMA**  
**Premium**

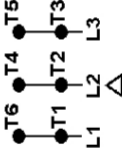
MADE IN MEXICO

**MAT: 12648444 CC029A**  
**W01.T00IC0X0N**  
**MODEL 007120T3H254T-S**  
**05MAY2022 S/N:**

PH 3	Hz 60	HP 7.5
FR 254/6T		KW 5.5
DUTY CONT.		V 575
ALT 1000 m.a.s.l.		A 8.16
INS CL F AT 80K		SFA 9.38
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE F	PF 0.75
		RPM 1175
		NEMA NOM. EFF 90.2%

Inverter duty motor For use on VPWM 1000:1 VT, 5:1 CT

DE 6309-Z-C3	ODE 6208-Z-C3	MOBIL POLYREX EM	20000h
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T1-BLU  
 T2-WHT  
 T3-ORG  
 T4-YEL  
 T5-BLK  
 T6-GRY

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.

