

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12674849

Catalog # : 007180T3E213T-S

Frame : 213/5T  
 Output : 7.5 HP (5.5 kW)  
 Poles : 4  
 Frequency : 60 Hz  
 Rated voltage : 208-230/460 V  
 Rated current : 20.5-18.5/9.25 A  
 L. R. Amperes : 147-133/66.6 A  
 LRC : 7.2x(Code H)  
 No load current : 7.58-8.79/4.39 A  
 Rated speed : 1770 rpm  
 Slip : 1.67 %  
 Rated torque : 22.0 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 320 %  
 Insulation class : F  
 Service factor : 1.15  
 Moment of inertia (J) : 1.03 sq.ft.lb  
 Design : B

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

Output	25%	50%	75%	100%
Efficiency (%)	88.6	89.5	90.2	91.0
Power Factor	0.39	0.65	0.77	0.82

### 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).
- (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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Date	26/01/2018			

# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



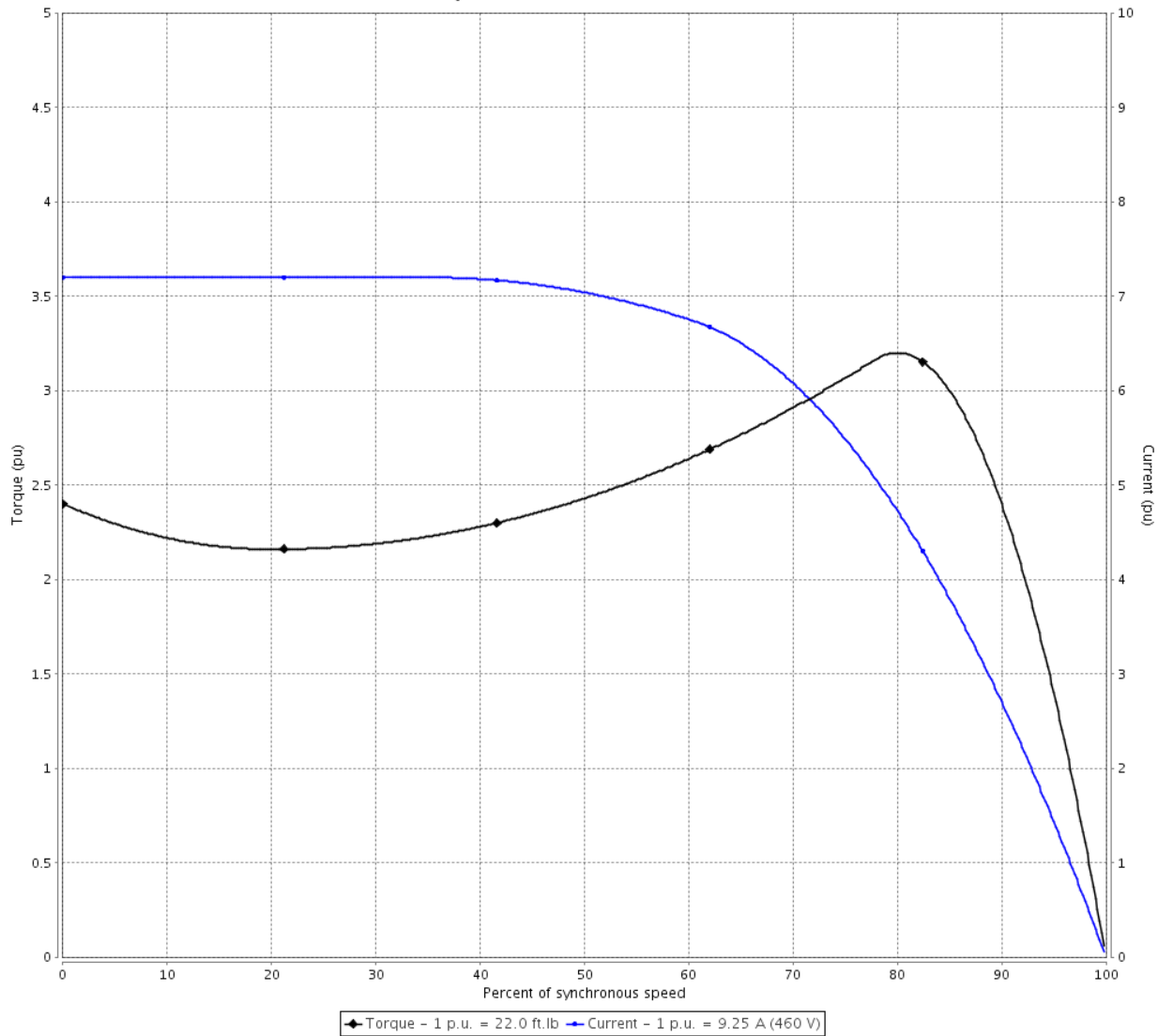
Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12674849

Catalog # : 00718OT3E213T-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 208-230/460 V 60 Hz 4P

Rated current	: 20.5-18.5/9.25 A	Moment of inertia (J)	: 1.03 sq.ft.lb
LRC	: 7.2	Duty cycle	: Cont.(S1)
Rated torque	: 22.0 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

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

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

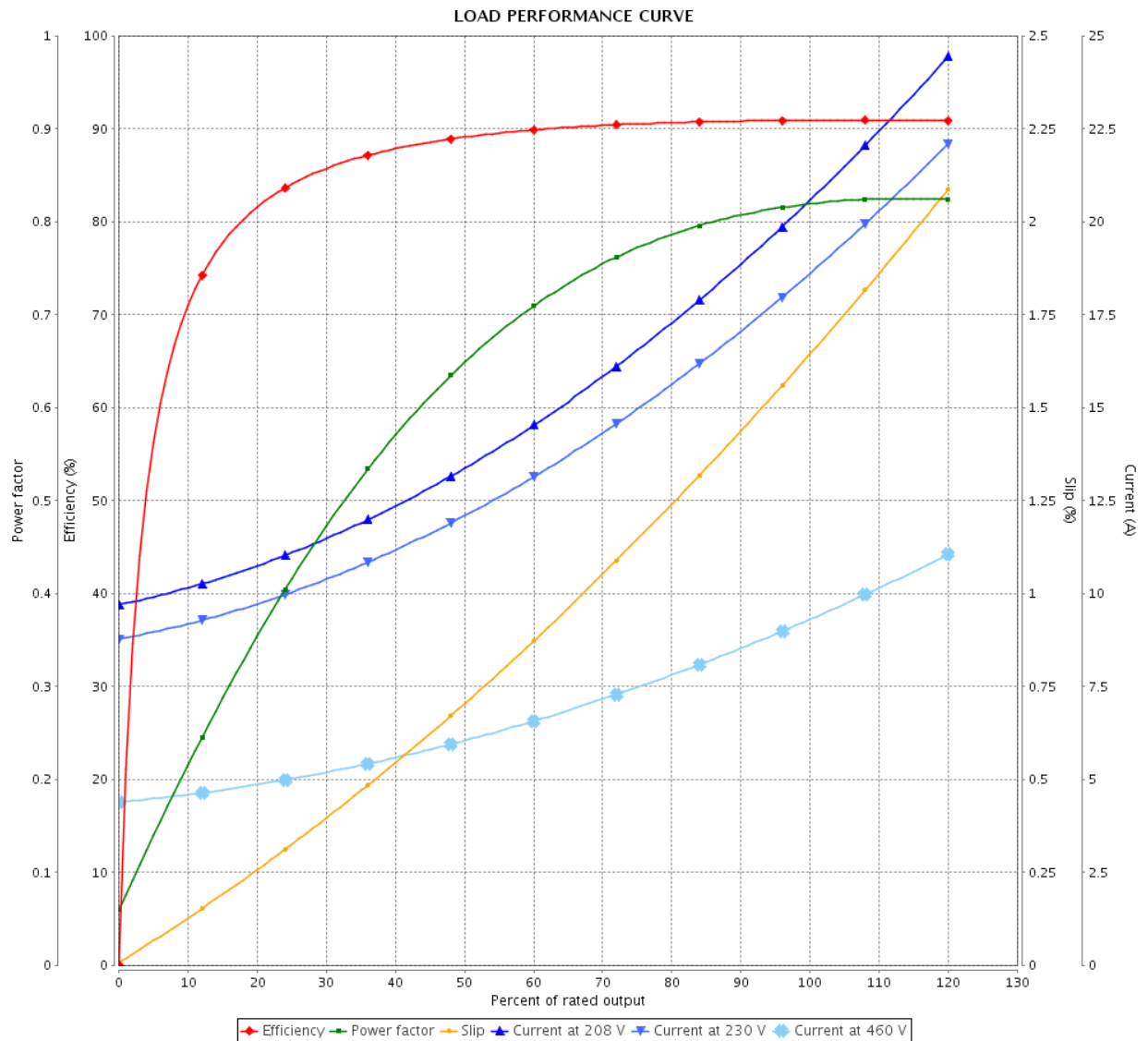


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12674849

Catalog # : 007180T3E213T-S



Performance : 208-230/460 V 60 Hz 4P

Rated current : 20.5-18.5/9.25 A  
 LRC : 7.2  
 Rated torque : 22.0 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 320 %  
 Rated speed : 1770 rpm

Moment of inertia (J) : 1.03 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

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Efficiency Three-Phase

Product code : 12674849

Catalog # : 00718OT3E213T-S

Performance : 208-230/460 V 60 Hz 4P

Rated current : 20.5-18.5/9.25 A  
LRC : 7.2  
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Breakdown torque : 320 %  
Rated speed : 1770 rpm

Moment of inertia (J) : 1.03 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

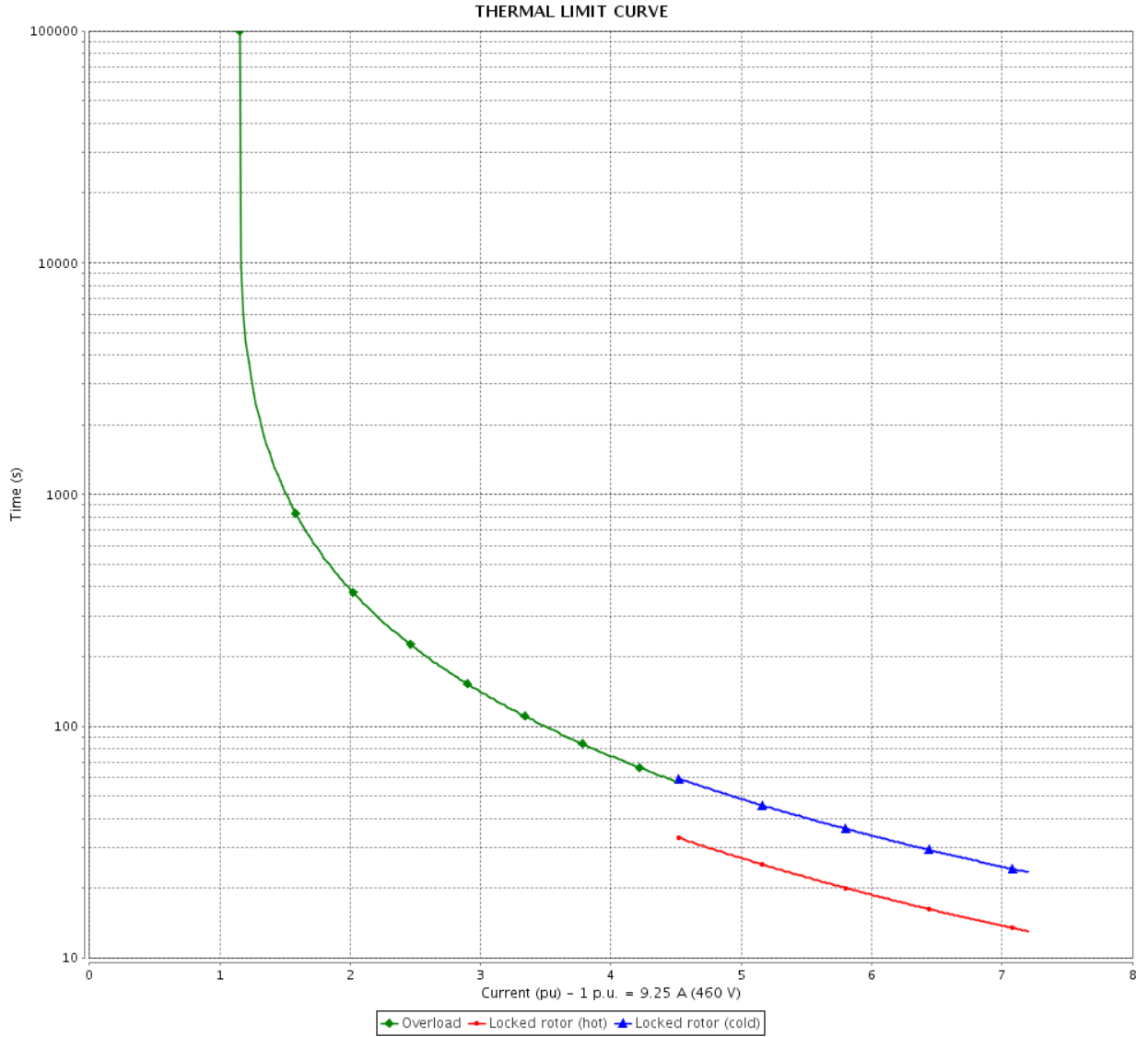
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

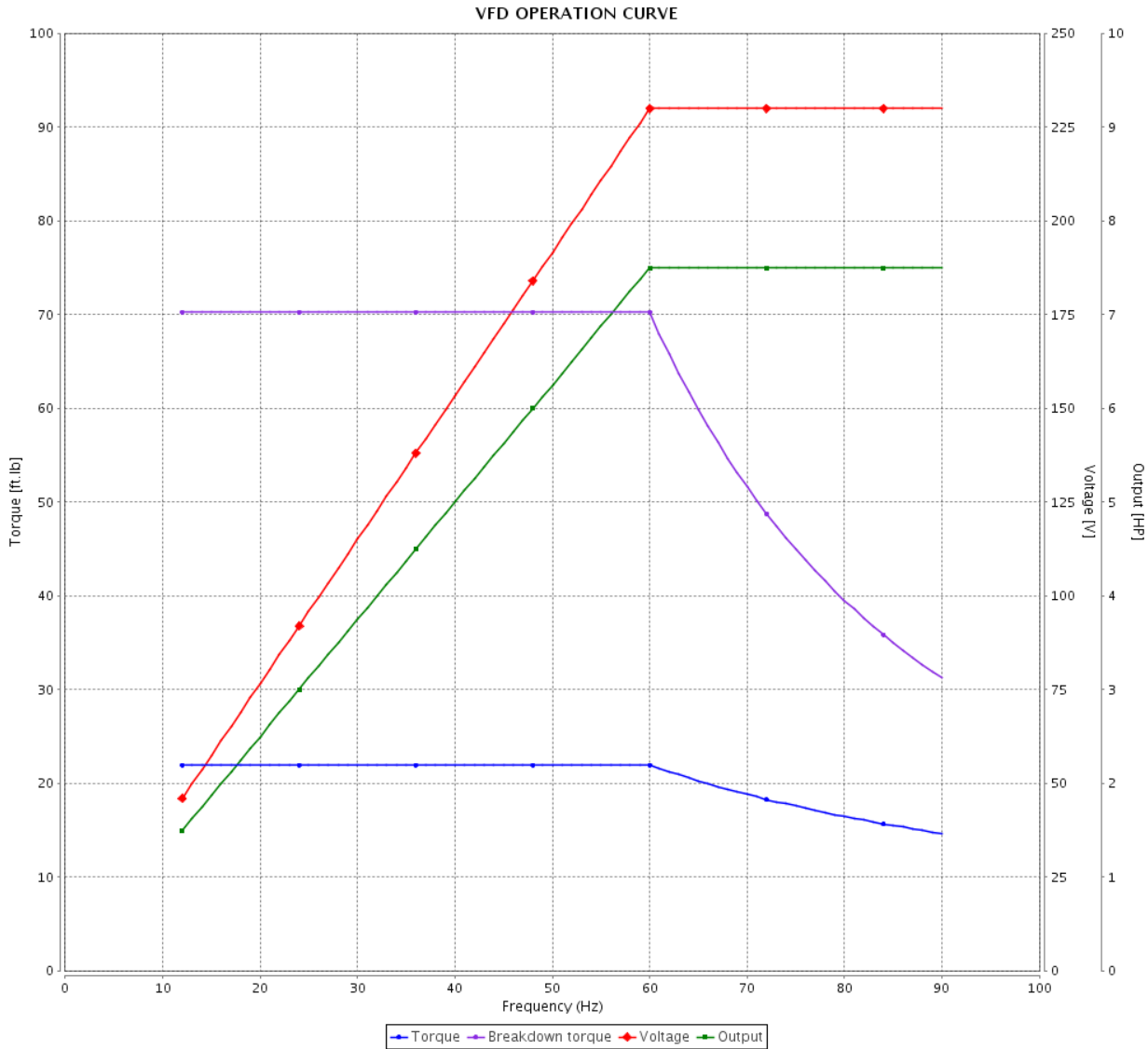


Customer :

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase

Product code : 12674849

Catalog # : 007180T3E213T-S



Performance : 208-230/460 V 60 Hz 4P

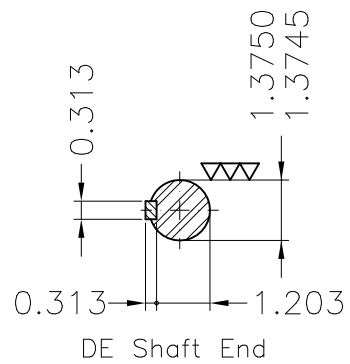
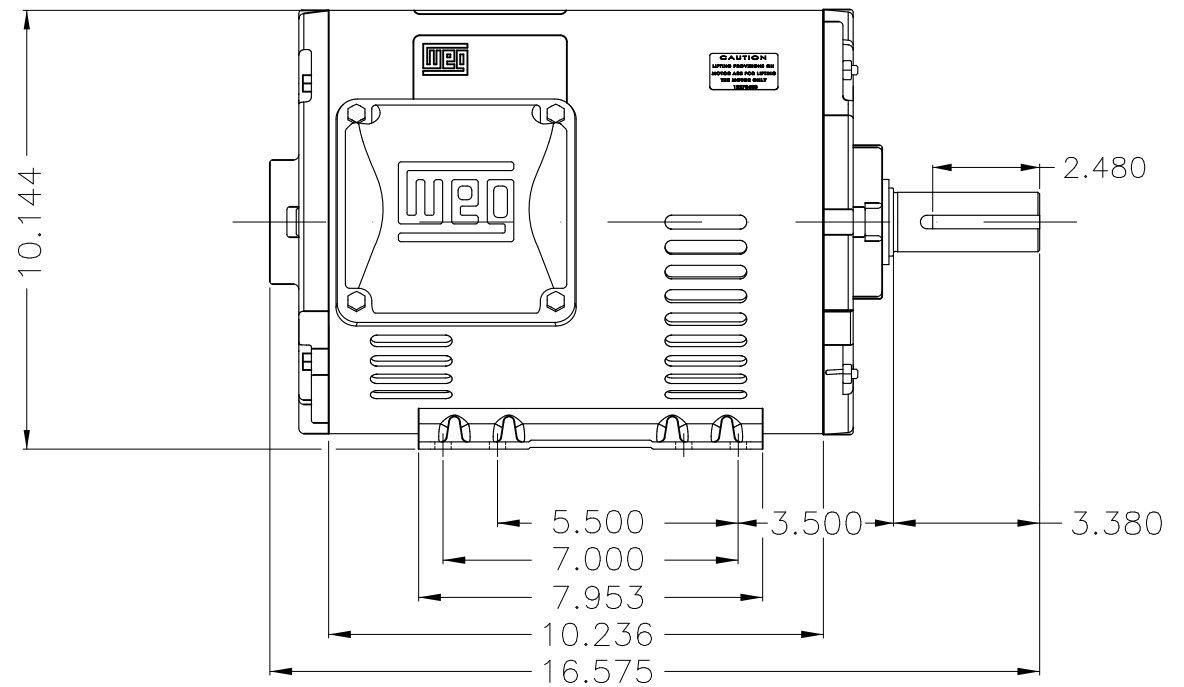
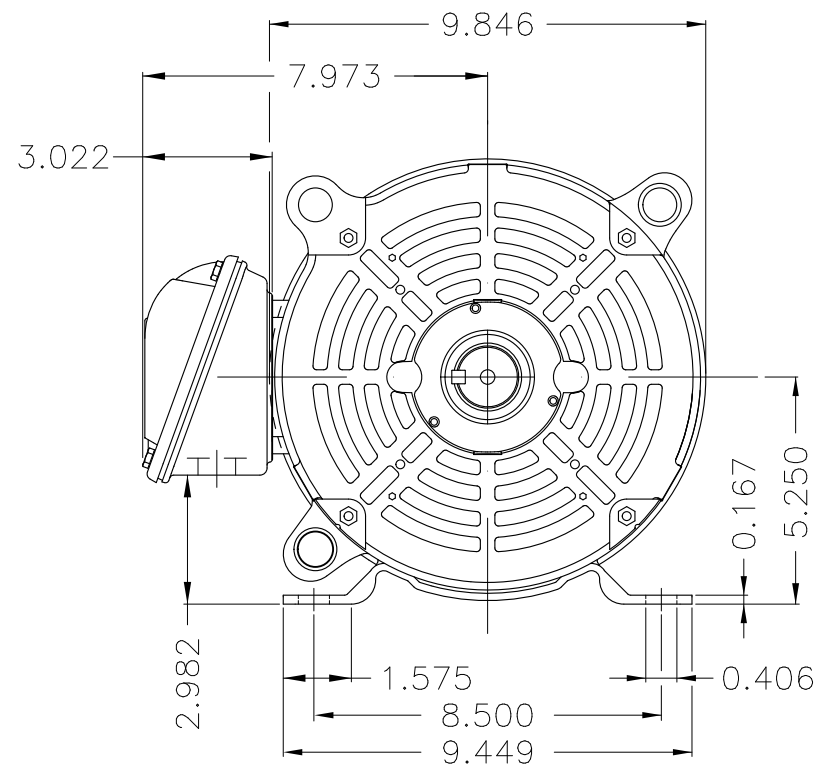
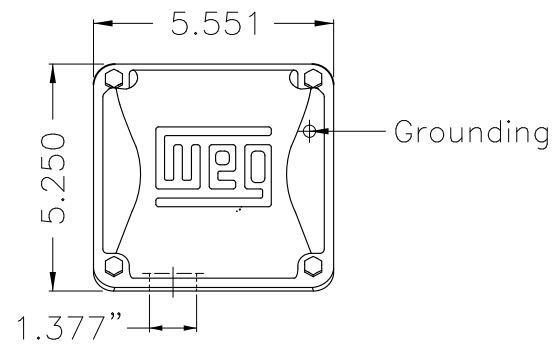
Rated current : 20.5-18.5/9.25 A  
 LRC : 7.2  
 Rated torque : 22.0 ft.lb  
 Locked rotor torque : 240 %  
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 Rated speed : 1770 rpm

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Dimensões em polegada  
Dimensions in inches

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



Color Munsell N 1 matte black  
Painting plan 207N  
Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	USERADMIN	THREE PHASE ODP ROLLED STEEL NEMA PREM.					
CHECKED		FRAME 213/5T ODP					
RELEASED		WEG code: 12674849					
REL DT	26.01.2018	WMO Jaragua do Sul	Product Engineering	SHEET	1 / 1		

7.5 HP 04 Poles 60Hz

A

