

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :						
Product line		: W40 NEMA Premium Efficiency Three-Phase		Product code : 14495599		
			Catalog # :	02536OT3H256TC-W40		
Frame	:	254/6TC		Locked rotor time		
Output	:	25 HP (18.5 kW)		: 19s (cold) 11s (hot)		
Poles	:	2		Temperature rise		
Frequency	:	60 Hz		: 80 K		
Rated voltage	:	575 V		Duty cycle		
Rated current	:	23.0 A		: Cont.(S1)		
L. R. Amperes	:	150 A		Ambient temperature		
LRC	:	6.5x(Code G)		: -20°C to +40°C		
No load current	:	6.80 A		Altitude		
Rated speed	:	3535 rpm		: 1000 m.a.s.l.		
Slip	:	1.81 %		Protection degree		
Rated torque	:	37.1 ft.lb		: IP23		
Locked rotor torque	:	200 %		Cooling method		
Breakdown torque	:	280 %		: IC01 - ODP		
Insulation class	:	F		Mounting		
Service factor	:	1.25		: F-1		
Moment of inertia (J)	:	1.13 sq.ft.lb		Rotation <sup>1</sup>		
Design	:	B		: Both (CW and CCW)		
Starting method	:	Direct On Line		Approx. weight <sup>3</sup>		
				: 253 lb		
Output	50%	75%	100%	Foundation loads		
Efficiency (%)	91.0	91.7	91.7	Max. traction		
Power Factor	0.77	0.85	0.88	Max. compression		
		<u>Drive end</u>		<u>Non drive end</u>		
Bearing type	:	6309 Z C3		6209 Z C3		
Sealing	:	Without Bearing Seal		Without Bearing Seal		
Lubrication interval	:	20000 h		20000 h		
Lubricant amount	:	13 g		9 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



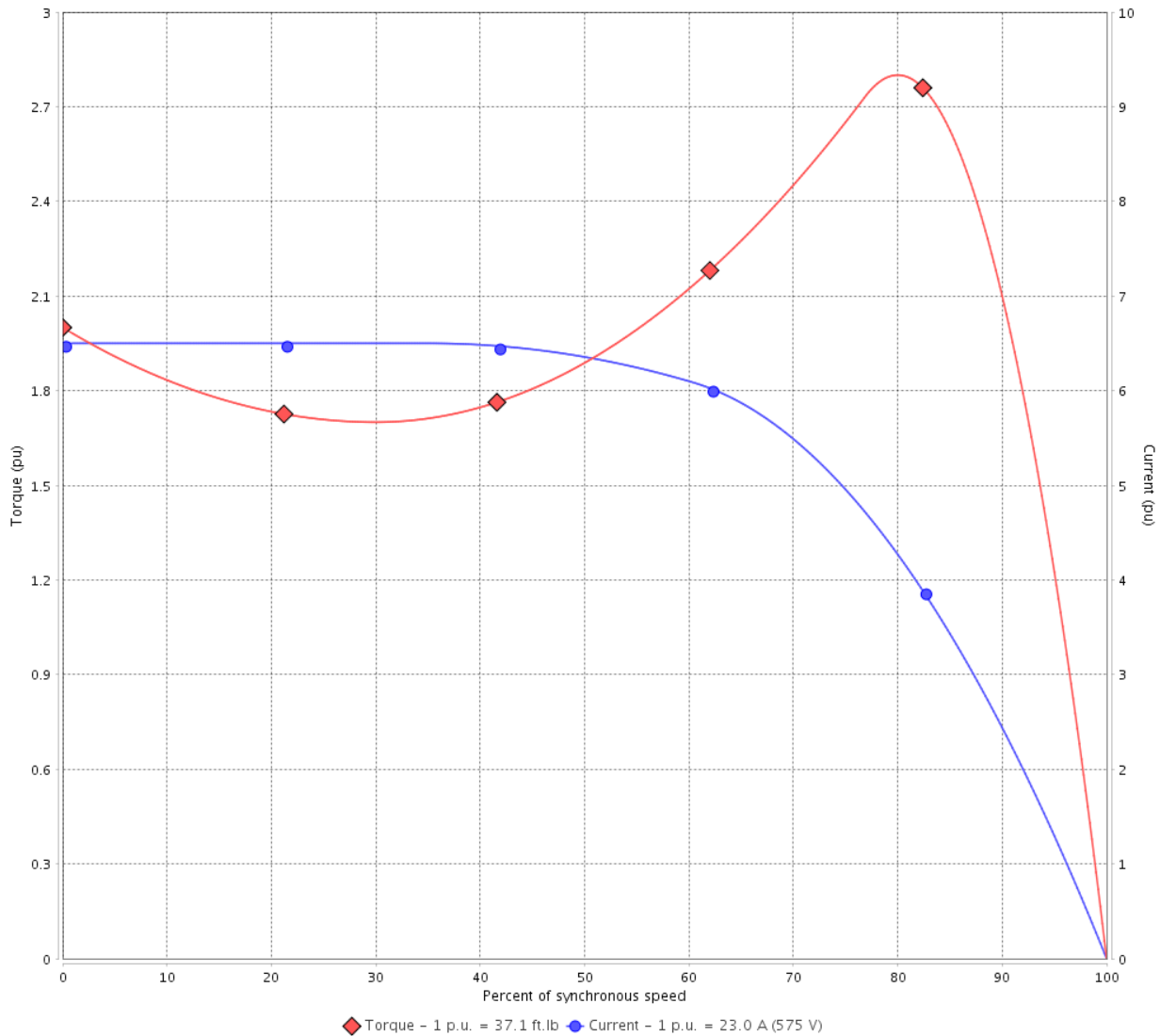
Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14495599

Catalog # : 02536OT3H256TC-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 23.0 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

Locked rotor time : 19s (cold) 11s (hot)

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Date	14/04/2022			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

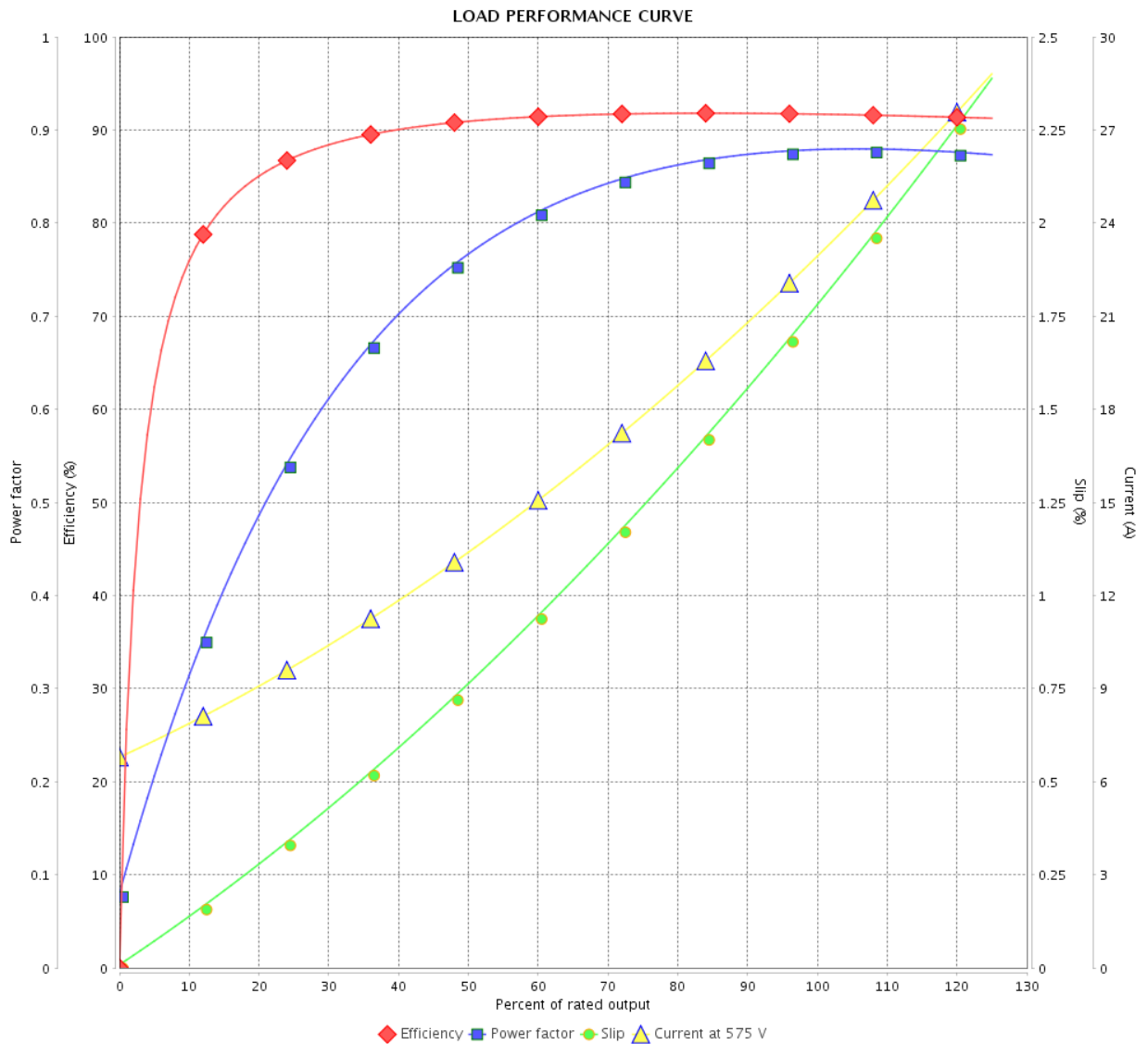


Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14495599

Catalog # : 02536OT3H256TC-W40



Performance : 575 V 60 Hz 2P

Rated current : 23.0 A  
 LRC : 6.5  
 Rated torque : 37.1 ft.lb  
 Locked rotor torque : 200 %  
 Breakdown torque : 280 %  
 Rated speed : 3535 rpm

Moment of inertia (J) : 1.13 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14495599

Catalog # : 02536OT3H256TC-W40

Performance : 575 V 60 Hz 2P

Rated current	: 23.0 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

Heating constant

Cooling constant

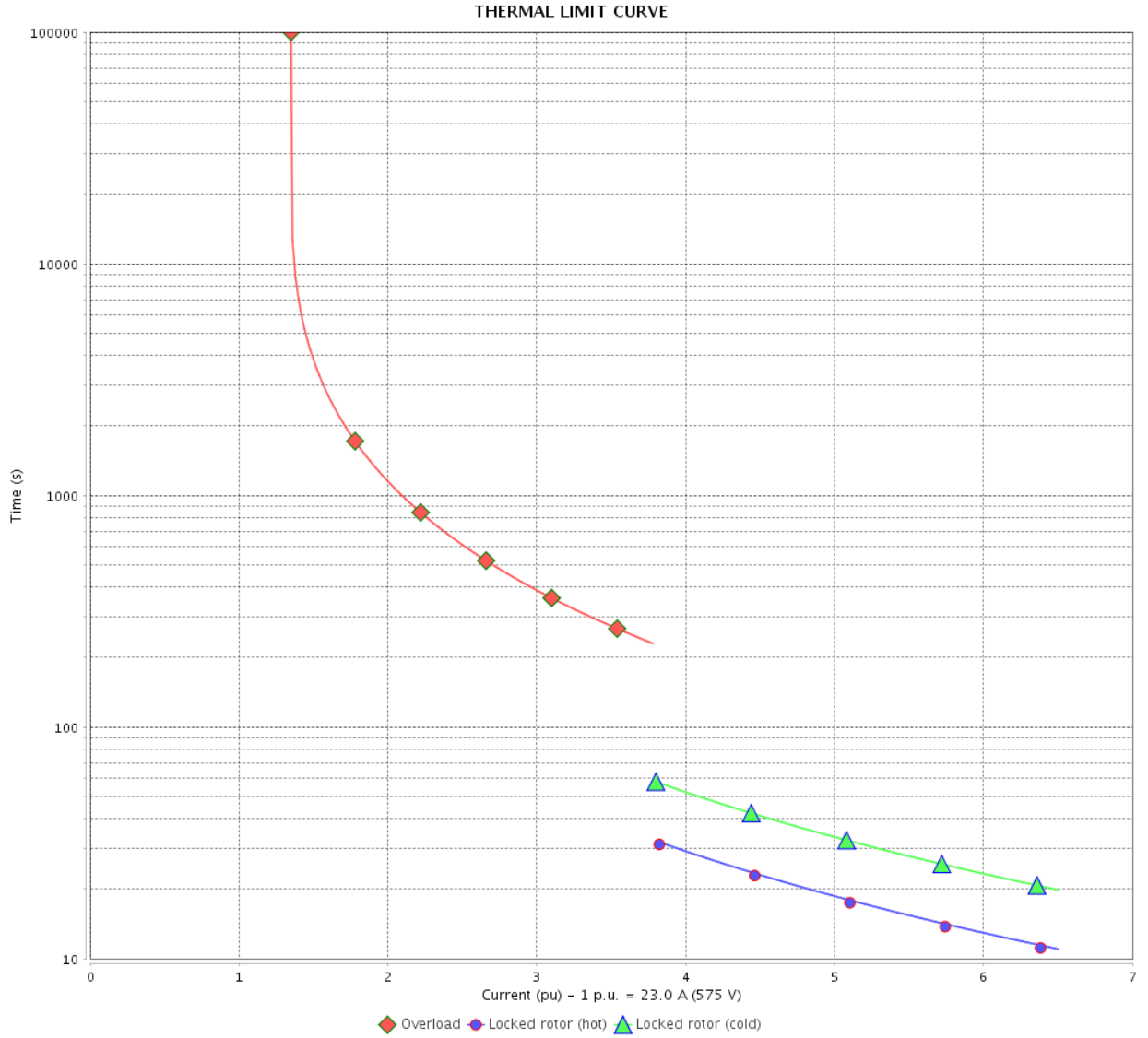
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Performed by				
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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Date				

# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



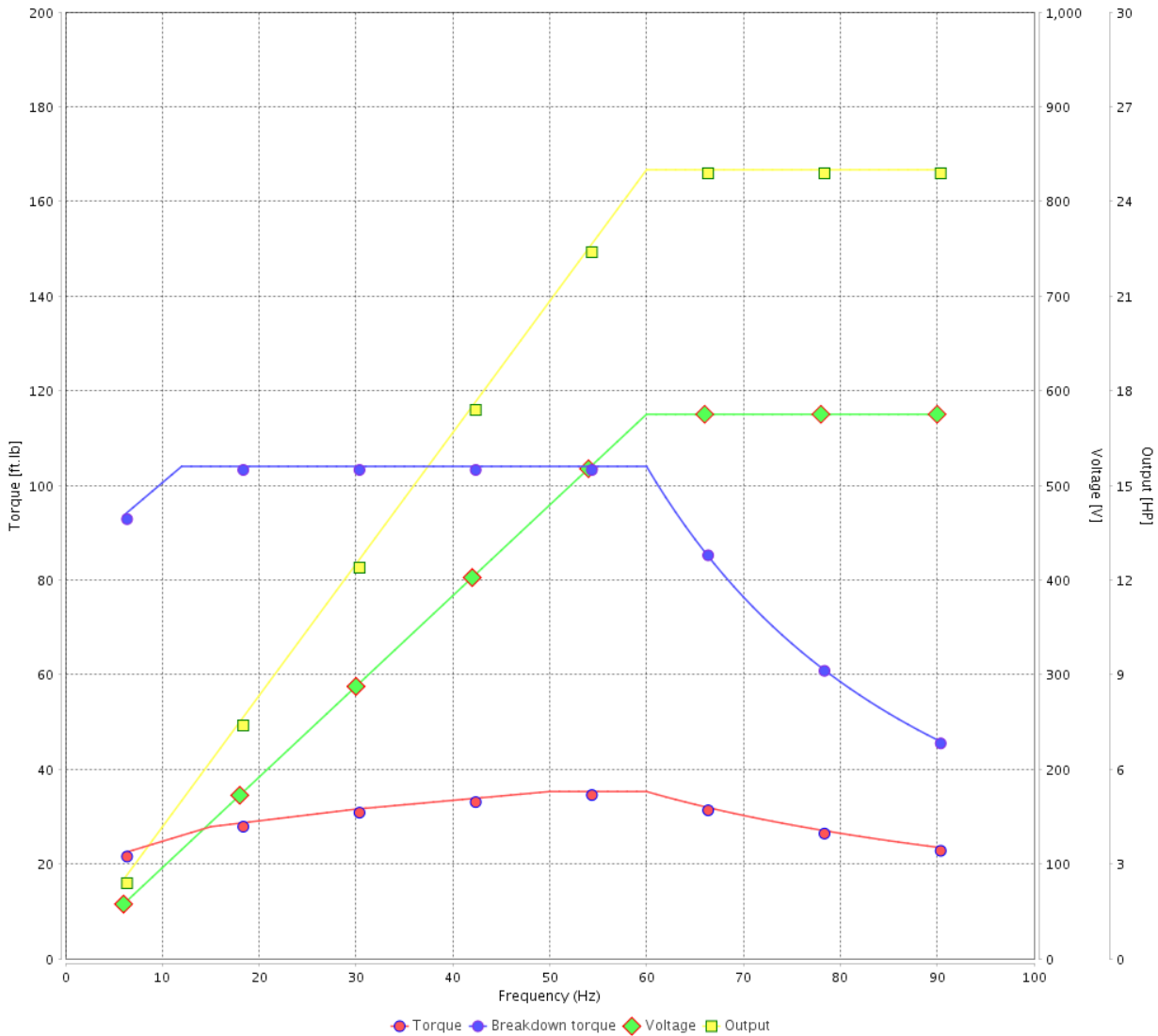
Customer :

Product line : W40 NEMA Premium Efficiency  
Three-Phase

Product code : 14495599

Catalog # : 02536OT3H256TC-W40

VFD OPERATION CURVE

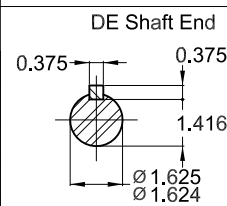
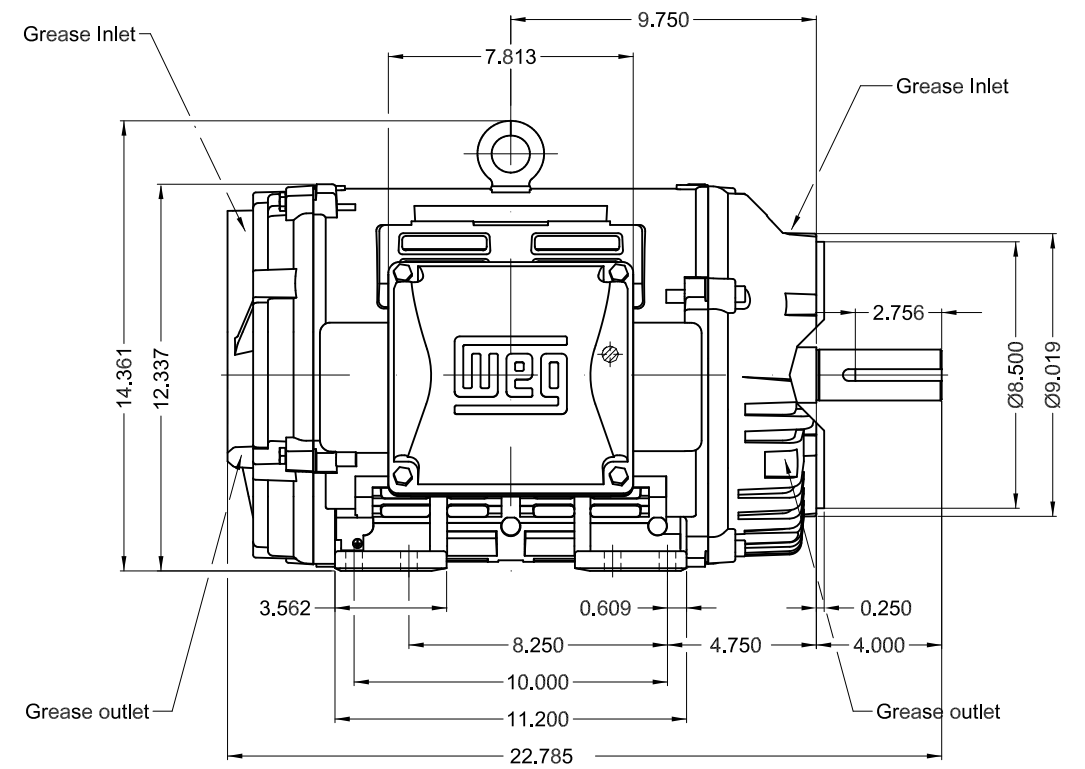
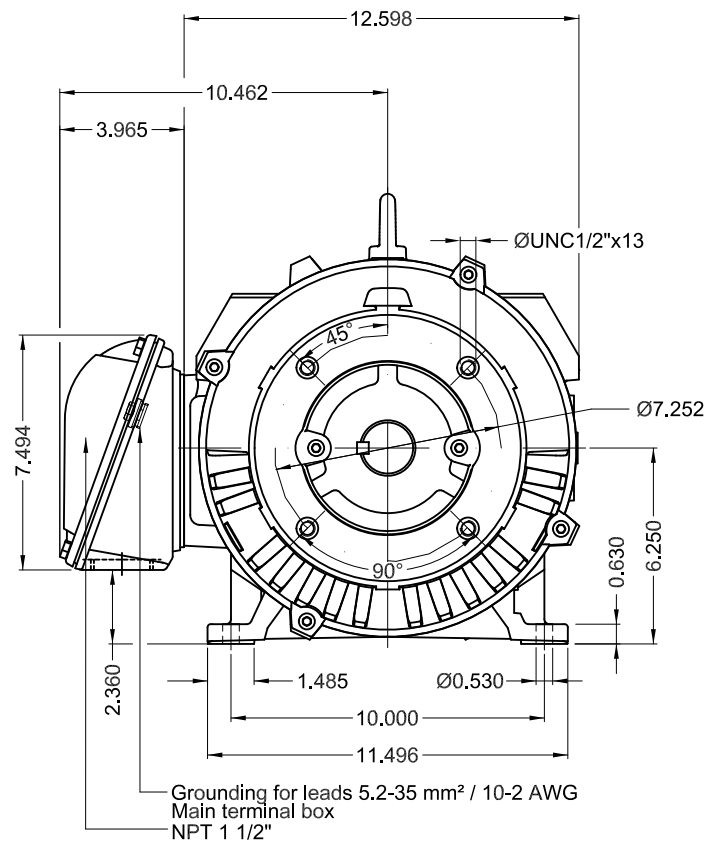


Performance : 575 V 60 Hz 2P

Rated current : 23.0 A  
LRC : 6.5  
Rated torque : 37.1 ft.lb  
Locked rotor torque : 200 %  
Breakdown torque : 280 %  
Rated speed : 3535 rpm

Moment of inertia (J) : 1.13 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.25  
Temperature rise : 80 K  
Design : B

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- Bearing cap
- Color RAL 5009
- Painting plan 203A
- Mounting NEMA F-1
- Mounting B34R(D)

25 HP 02 Poles 60 Hz A

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR W40 PREM. EFF. FRAME 254/6TC IP23 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

**PREVIEW**  
WDD



**WEG** **W40 NEMA**  
**CC029A Premium**  
*Inverter Duty Motor*



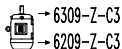
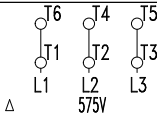
IEC 60034-1  
 MOD.T01#FOXON



For use on PWM, VT 1000:1, CT 3:1, 1.0SF

CP025502NPW40  
 MADE IN BRAZIL  
 14495599

PH 3	FR 254/6TC	HP(kW) 25(18.5)	Hz 60
V 575	A 23.0	IP23	
NEMA NOM EFF	91.7 %	RPM 3535	
ENCL ODP	DUTY CONT.	INS. CL. F $\Delta$ T 80 K	
PF 0.88	DES B	CODE G	AMB. 40°C
SF 1.25	SFA 28.8	ALT 1000 m.a.s.l.	



→ 6309-Z-C3  
 → 6209-Z-C3

MOBIL POLYREX EM  
 13 g 20000 h

240 Lbs