

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :			
Product line	: W40 NEMA Premium Efficiency Three-Phase	Product code :	14501181
		Catalog # :	04018OT3P324T-W40
Frame	: 324T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 40 HP (30 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 200 V	Altitude	: 1000 m.a.s.l.
Rated current	: 109 A	Protection degree	: IP23
L. R. Amperes	: 679 A	Cooling method	: IC01 - ODP
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 42.5 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1775 rpm	Noise level ²	: 66.0 dB(A)
Slip	: 1.39 %	Starting method	: Direct On Line
Rated torque	: 118 ft.lb	Approx. weight ³	: 449 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 5.69 sq.ft.lb		
Design	: B		
Output	25% 50% 75% 100%	Foundation loads	
Efficiency (%)	93.5 93.6 94.1 94.1	Max. traction	
Power Factor	0.44 0.70 0.80 0.84	Max. compression	
		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6312 Z C3	6211 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	21 g	11 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			
Checked by			
Date	12/04/2022		
		Page	Revision
		1 / 6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



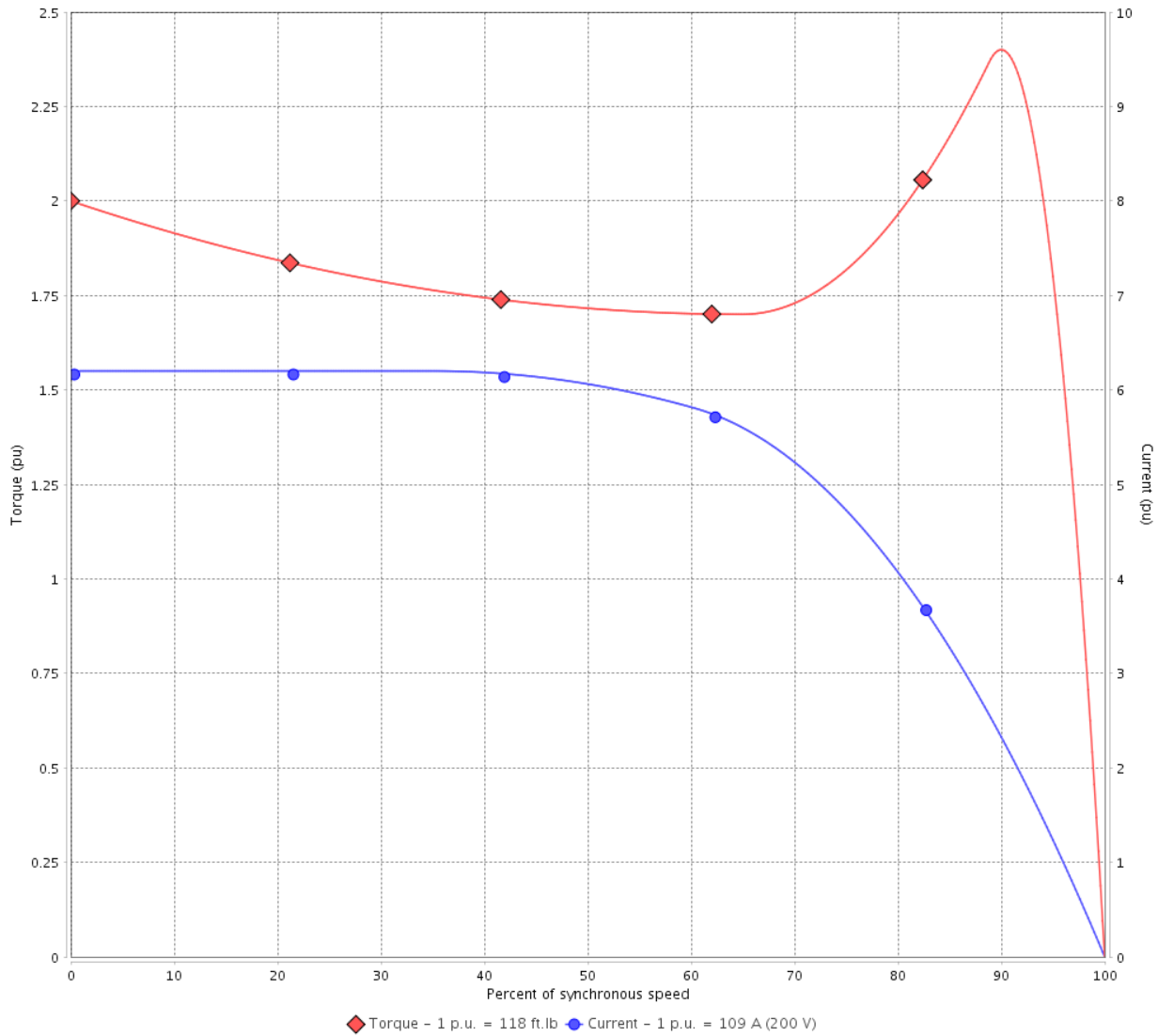
Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14501181

Catalog # : 04018OT3P324T-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 200 V 60 Hz 4P

Rated current	: 109 A	Moment of inertia (J)	: 5.69 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 118 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	12/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

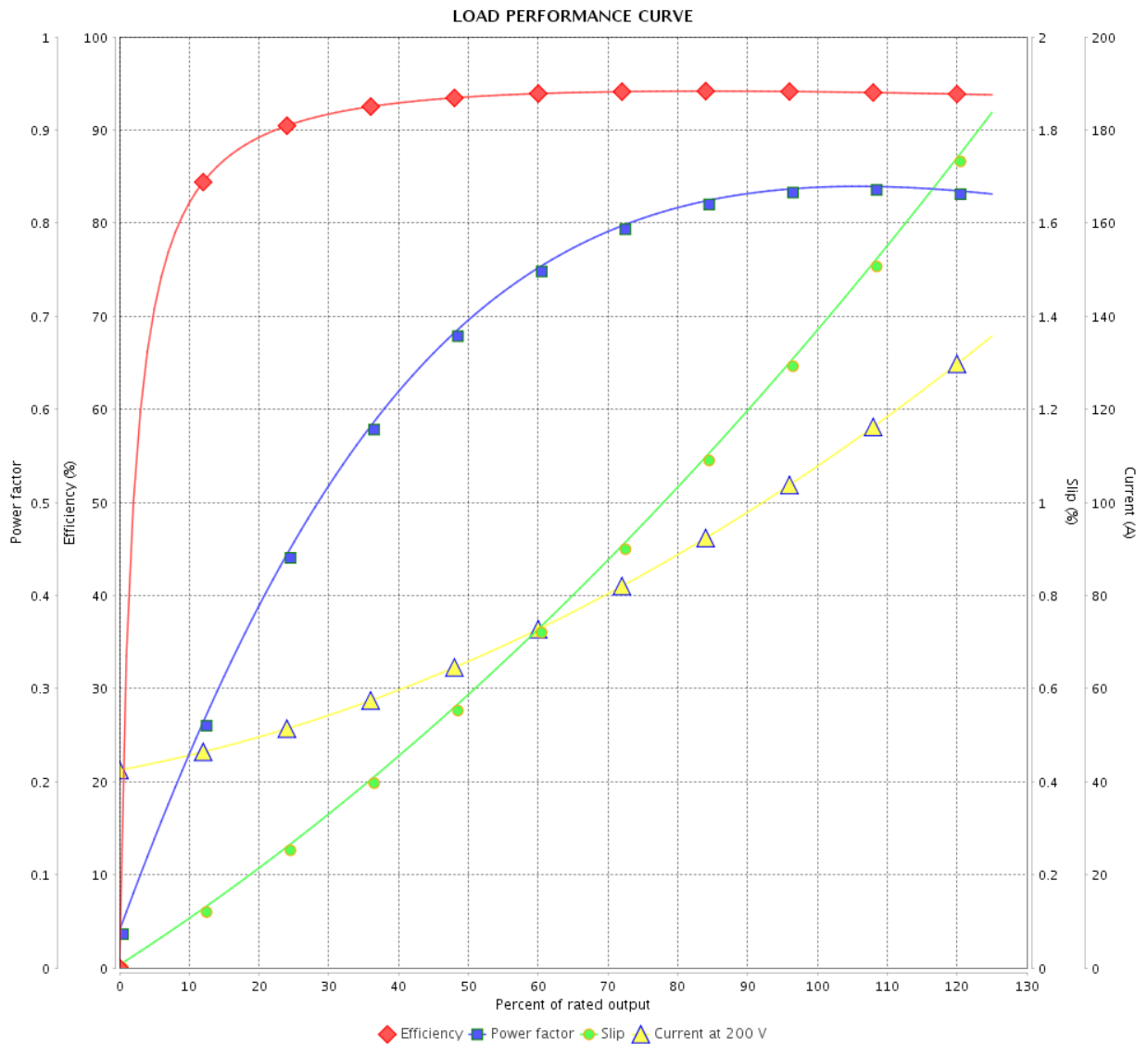


Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14501181

Catalog # : 04018OT3P324T-W40



Performance : 200 V 60 Hz 4P

Rated current : 109 A
 LRC : 6.2
 Rated torque : 118 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 5.69 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		3 / 6		
Date		12/04/2022		

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase
 Product code : 14501181
 Catalog # : 04018OT3P324T-W40

Performance : 200 V 60 Hz 4P

Rated current : 109 A	Moment of inertia (J) : 5.69 sq.ft.lb
LRC : 6.2	Duty cycle : Cont.(S1)
Rated torque : 118 ft.lb	Insulation class : F
Locked rotor torque : 200 %	Service factor : 1.25
Breakdown torque : 240 %	Temperature rise : 80 K
Rated speed : 1775 rpm	Design : B

Heating constant

Cooling constant

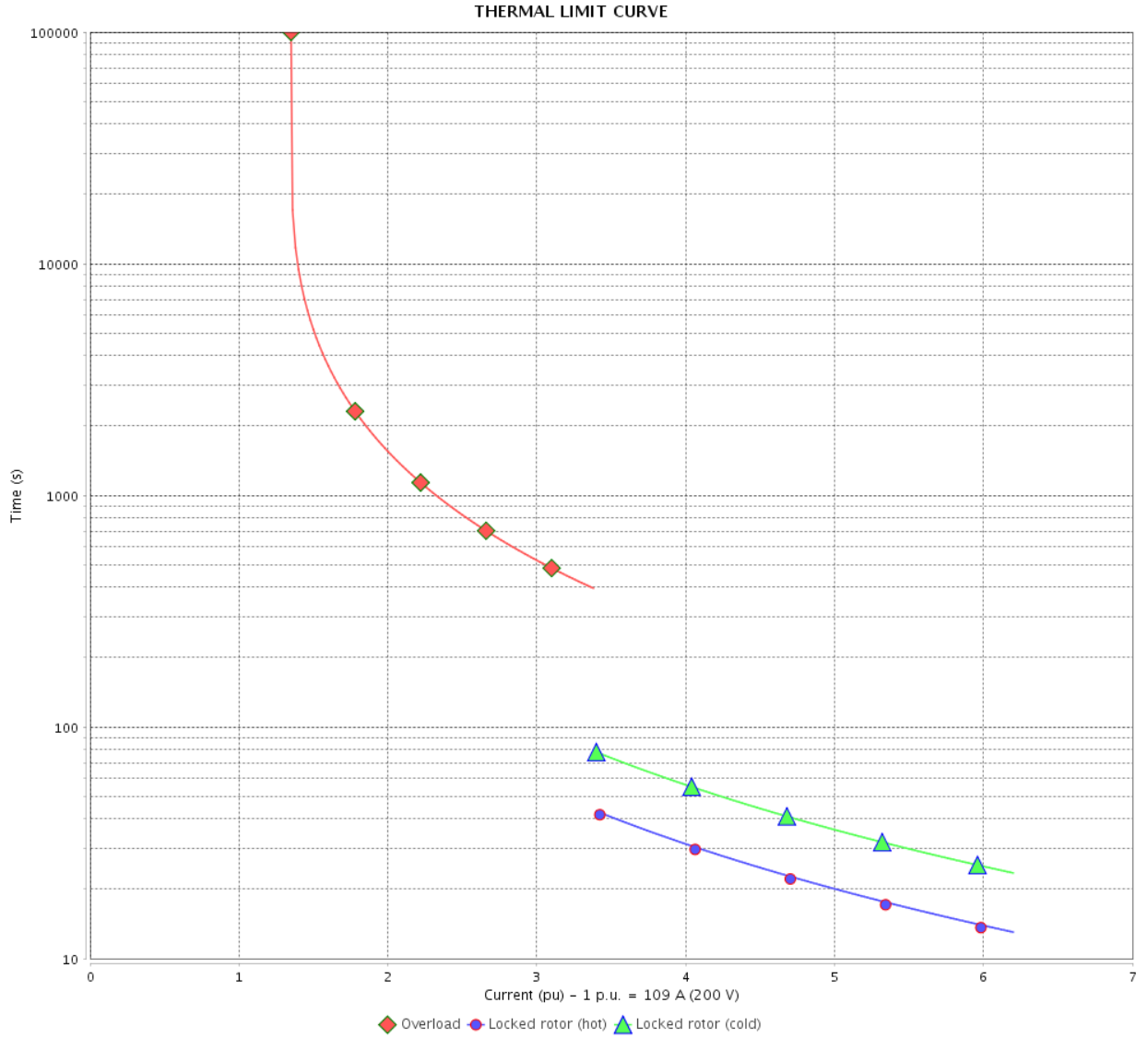
Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date	12/04/2022			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6		Revision
Checked by				
Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

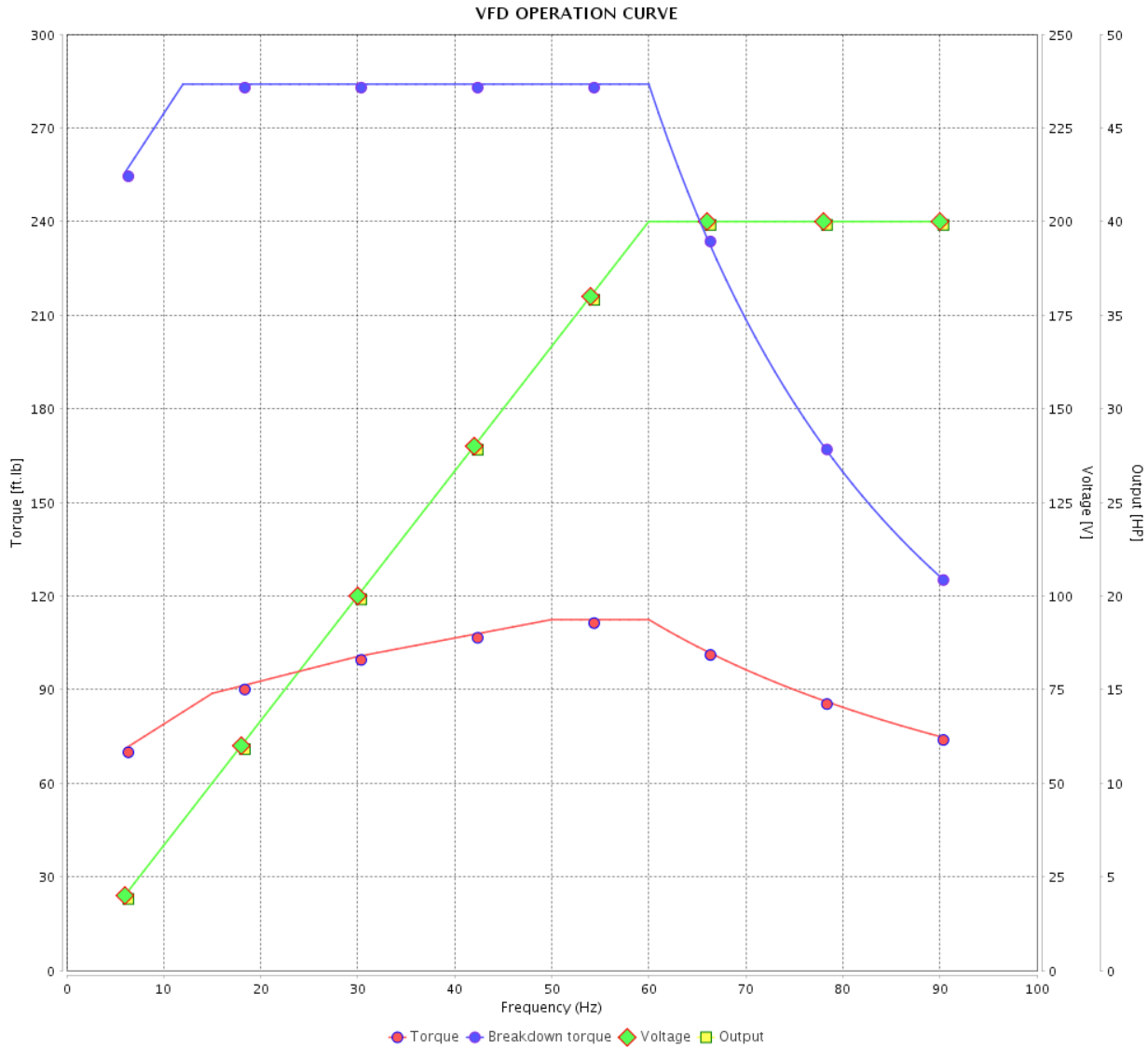


Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14501181

Catalog # : 04018OT3P324T-W40

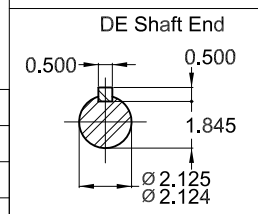
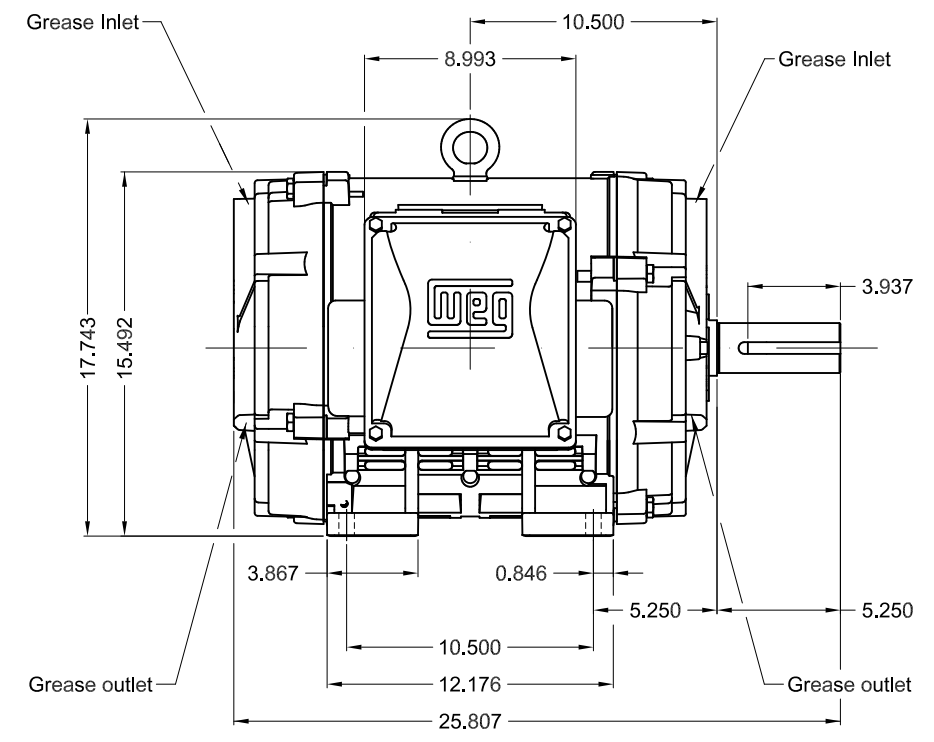
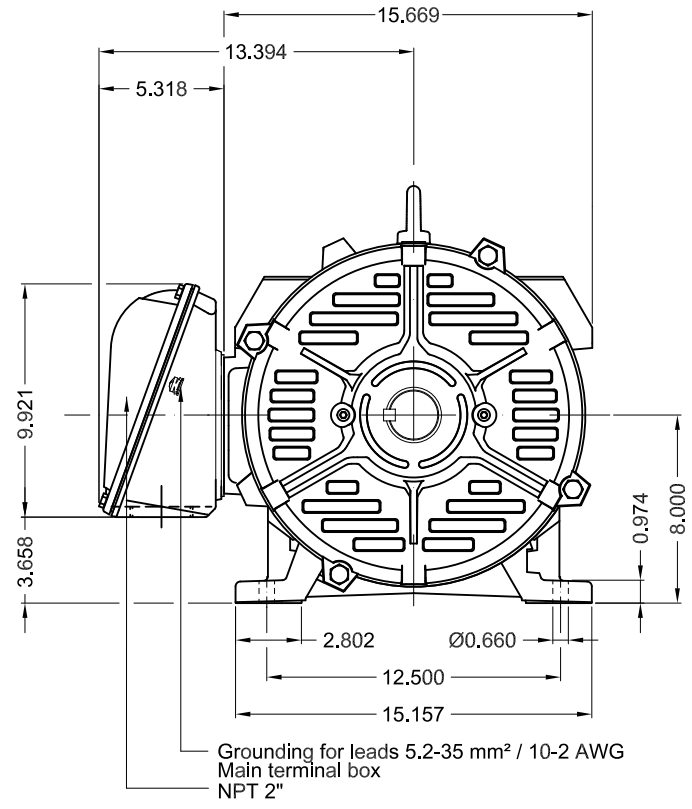


Performance : 200 V 60 Hz 4P

Rated current : 109 A
LRC : 6.2
Rated torque : 118 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1775 rpm

Moment of inertia (J) : 5.69 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	12/04/2022			



Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B3R(D)

40 HP 04 Poles 60 Hz A

1:8

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 PREM. EFF.					
CHECKED		FRAME 324T IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



MODEL 040180T3P324T-W40
MADE IN BRAZIL
14501181

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

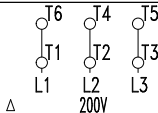


IEC 60034-1
MOD.T01#FOXON



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

PH 3	FR 324T	HP(kW) 40(30)		Hz 60
V 200		A 109		IP23
NEMA NOM EFF		94.1	%	RPM 1775
ENCL ODP	DUTY CONT.		INS. CL. F Δ T 80 K	
PF 0.84		DES B	CODE G	AMB. 40°C
SF 1.25		SFA 136		ALT 1000 m.a.s.l.



→ 6312-Z-C3
→ 6211-Z-C3

MOBIL POLYREX EM
21 g 20000 h

450 Lbs