

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase			
Product code :	14484487			
Catalog # :	02036OT3H254JM-W40			
Frame : 254JM Output : 20 HP (15 kW) Poles : 2 Frequency : 60 Hz Rated voltage : 575 V Rated current : 19.4 A L. R. Amperes : 122 A LRC : 6.3x(Code G) No load current : 6.72 A Rated speed : 3535 rpm Slip : 1.81 % Rated torque : 29.7 ft.lb Locked rotor torque : 200 % Breakdown torque : 280 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 0.8718 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP23 Cooling method : IC01 - ODP Mounting : F-1 Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ³ : 212 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	90.0 90.2 91.0 91.0			
Power Factor	0.48 0.72 0.82 0.85			
Foundation loads				
Max. traction				
Max. compression				
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 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.				
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		1 / 6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



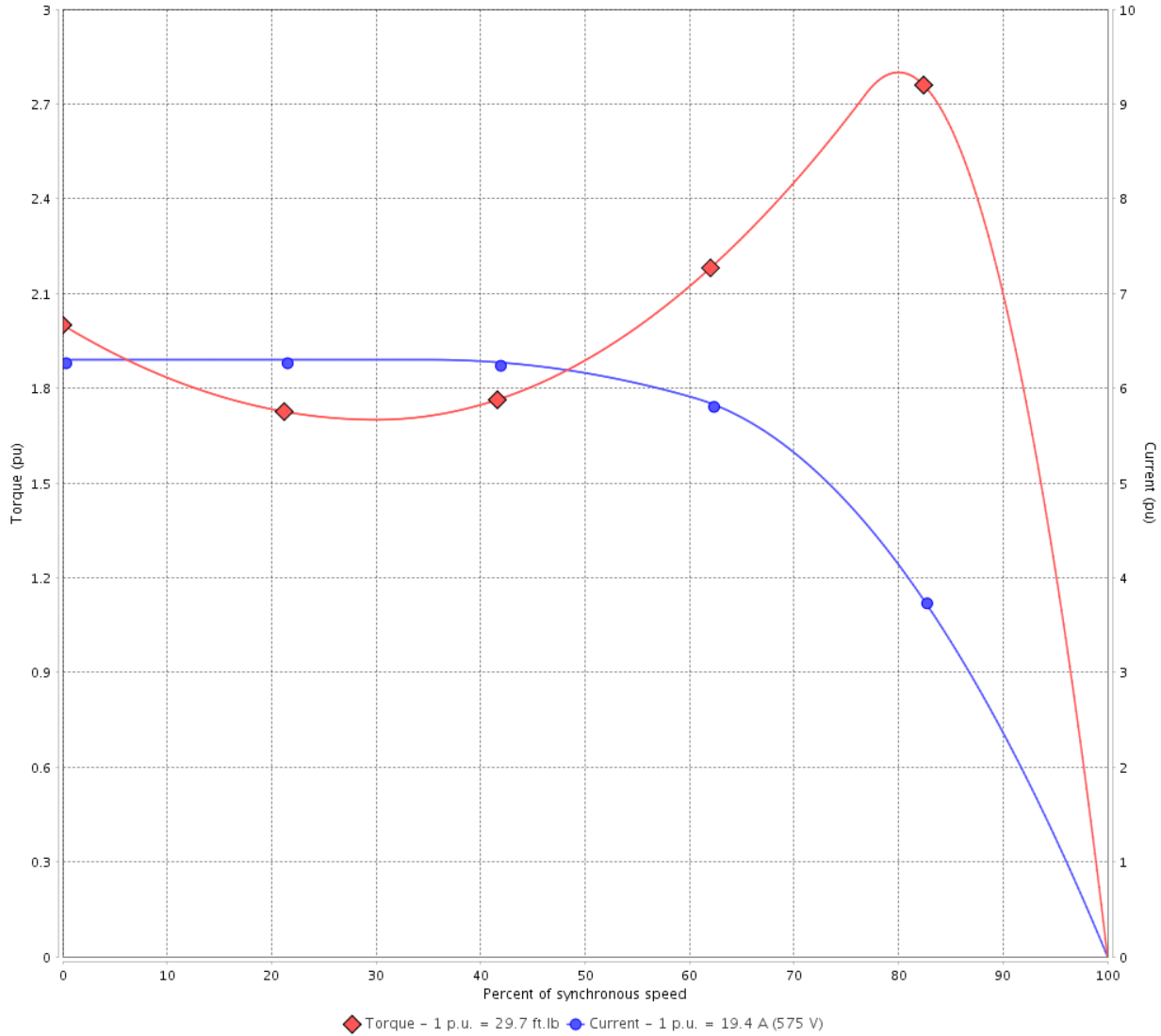
Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14484487

Catalog # : 02036OT3H254JM-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 19.4 A	Moment of inertia (J)	: 0.8718 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 29.7 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 : 21s (cold) 12s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 6	Revision
Checked by				
Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

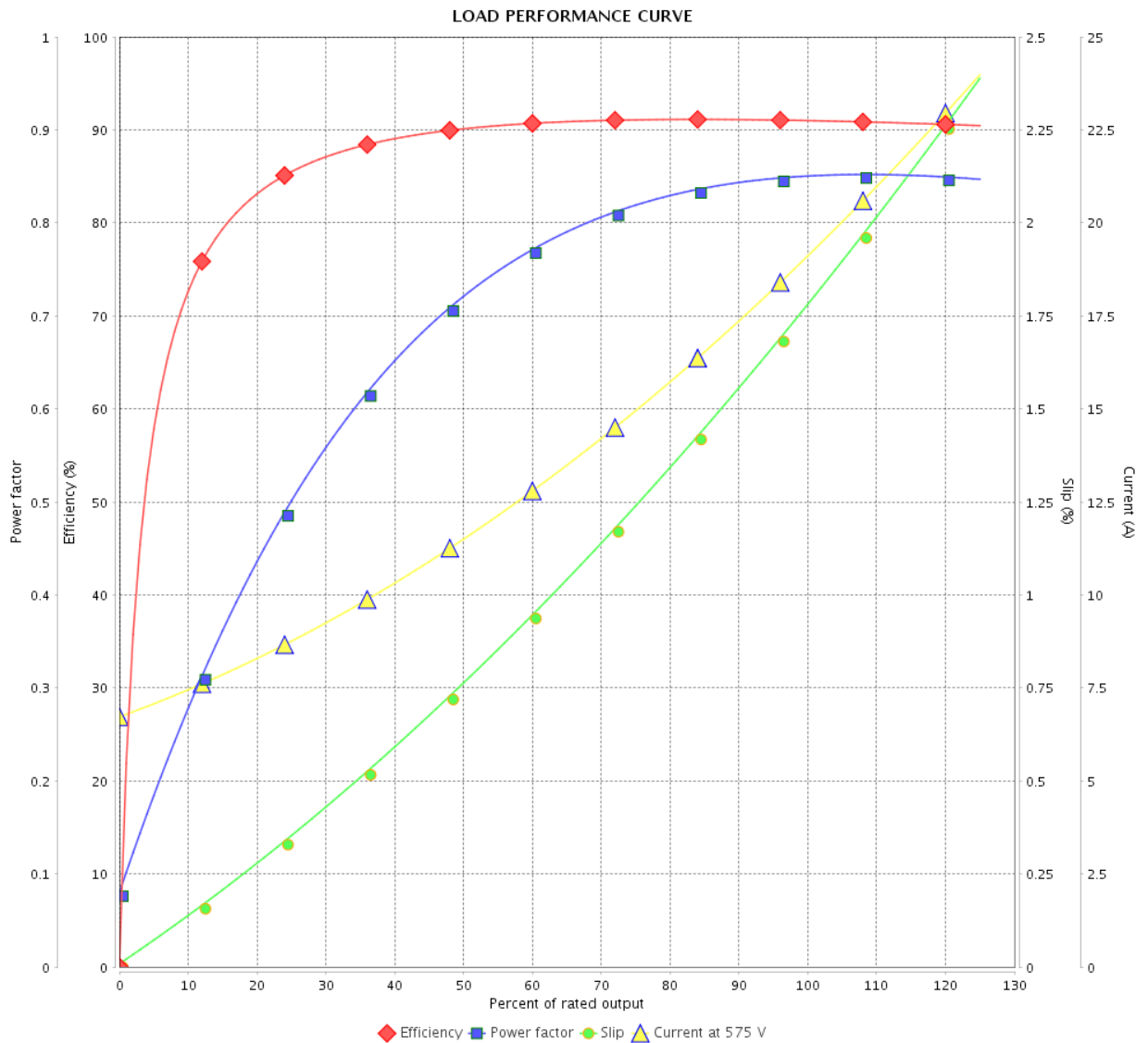


Customer :

Product line : W40 JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 14484487

Catalog # : 02036OT3H254JM-W40



Performance : 575 V 60 Hz 2P

Rated current : 19.4 A
 LRC : 6.3
 Rated torque : 29.7 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 280 %
 Rated speed : 3535 rpm

Moment of inertia (J) : 0.8718 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				
Checked by				
Date				
		Page	Revision	
		3 / 6		

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 14484487

Catalog # : 02036OT3H254JM-W40

Performance : 575 V 60 Hz 2P

Rated current : 19.4 A
LRC : 6.3
Rated torque : 29.7 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 280 %
Rated speed : 3535 rpm

Moment of inertia (J) : 0.8718 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

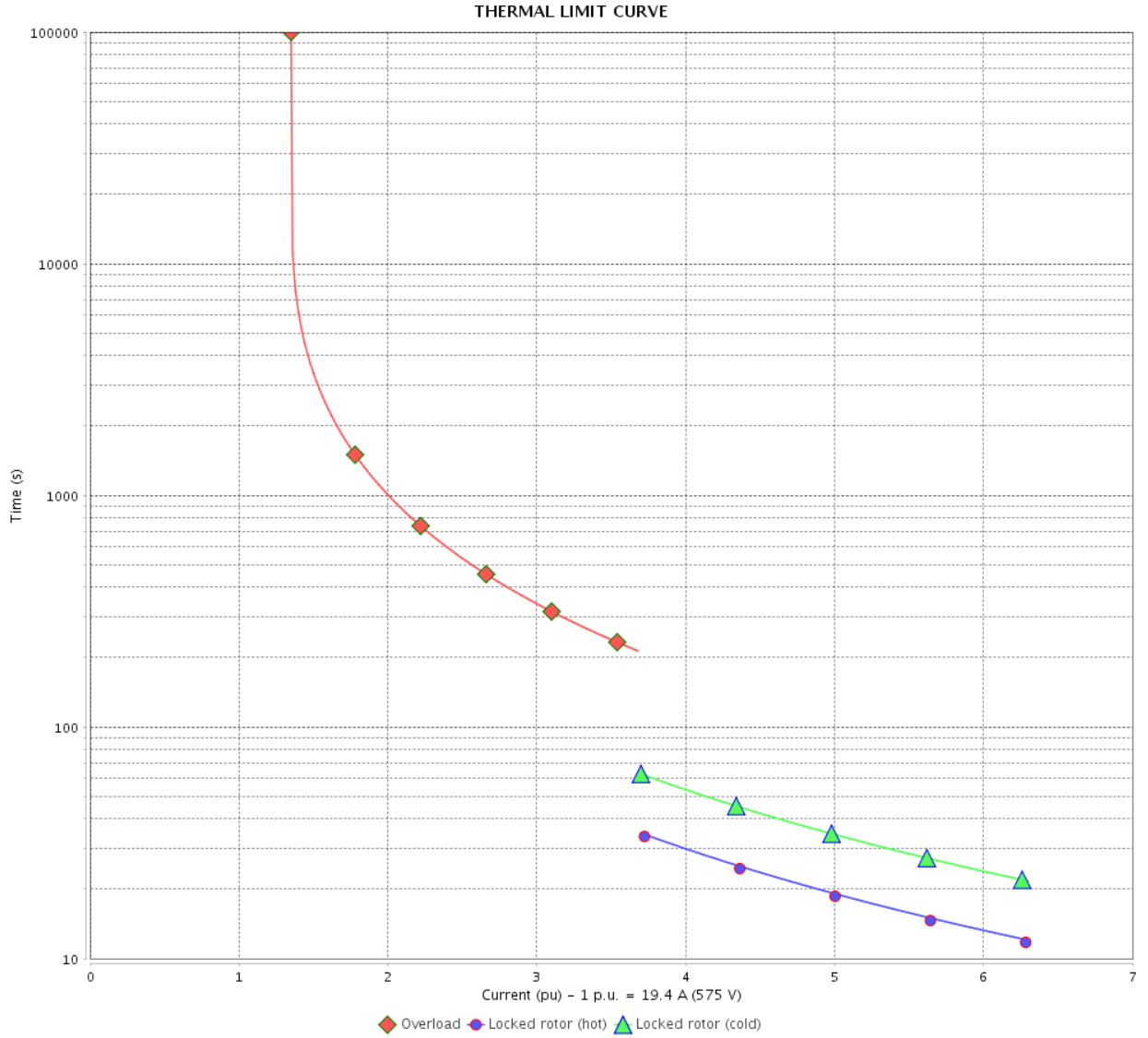
Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/04/2022		4 / 6	

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



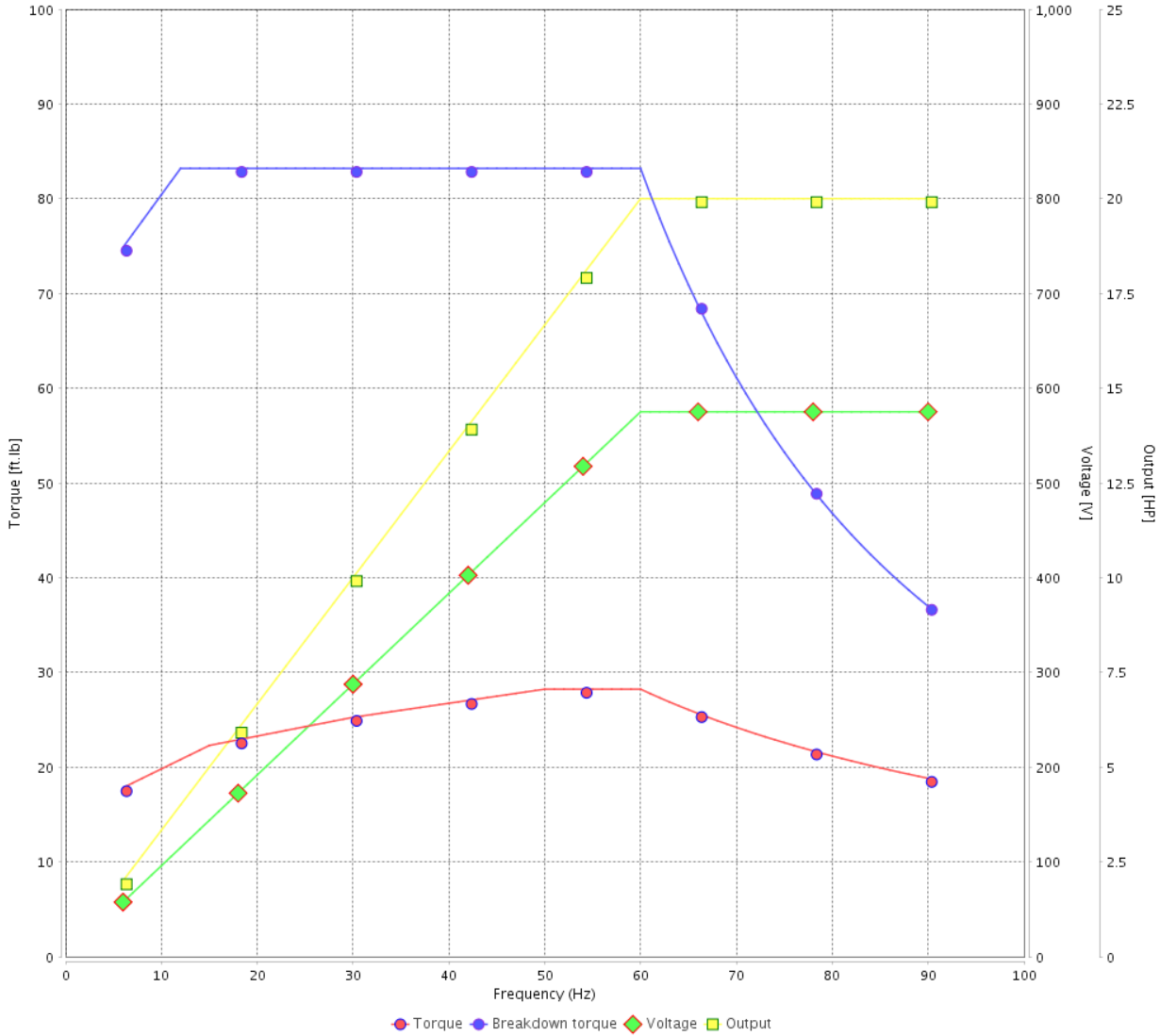
Customer : _____

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14484487

Catalog # : 02036OT3H254JM-W40

VFD OPERATION CURVE

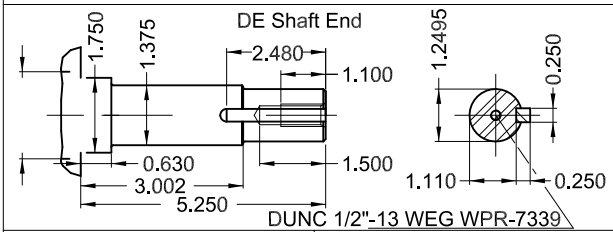
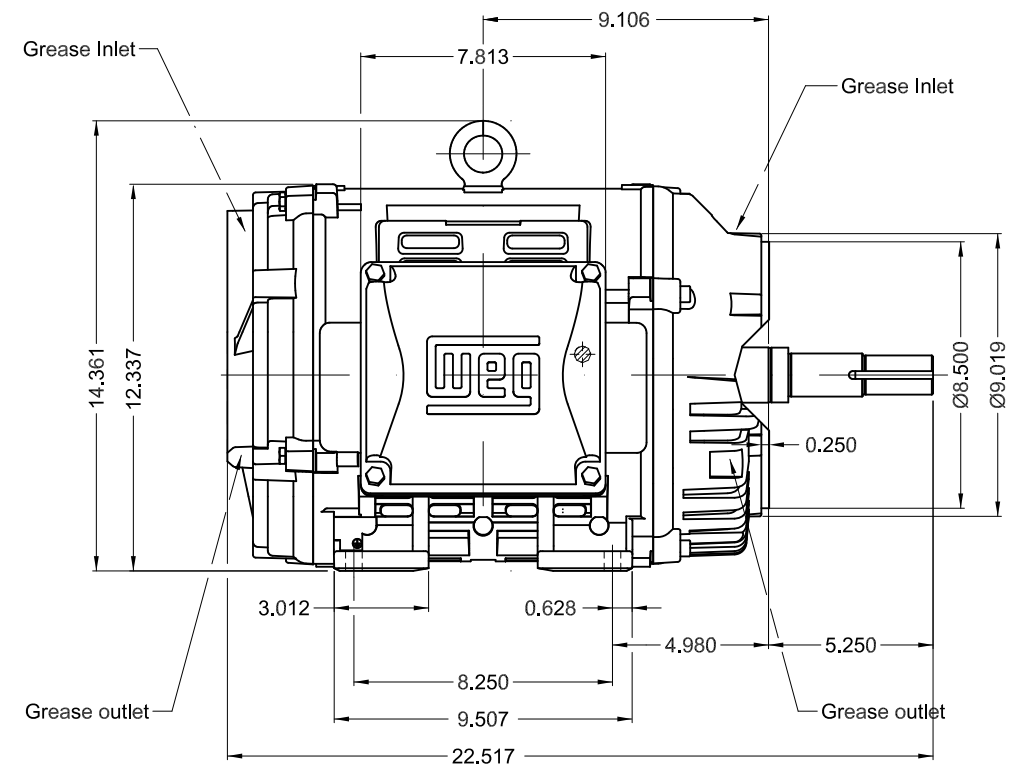
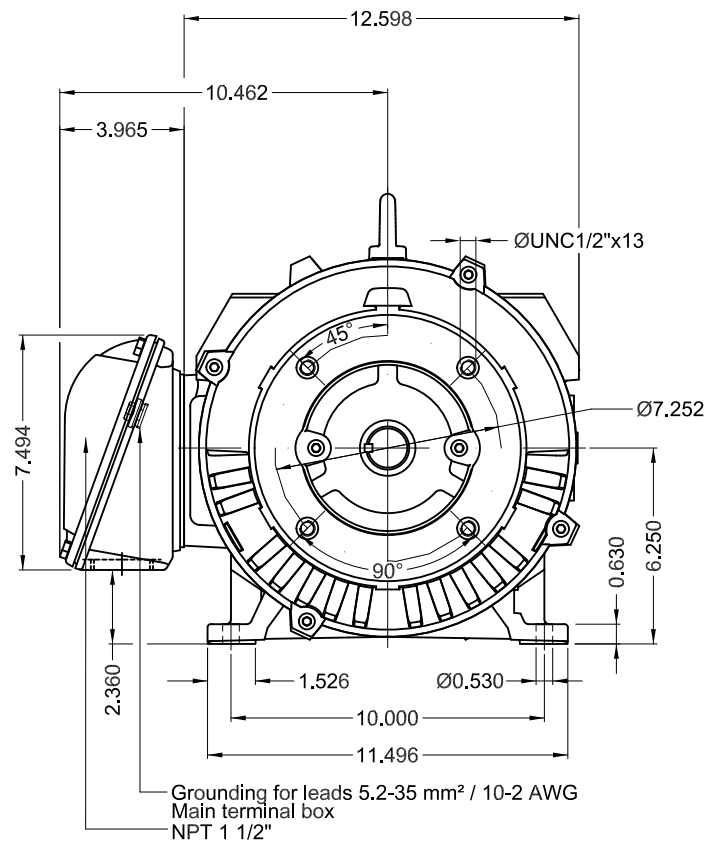


Performance : 575 V 60 Hz 2P

Rated current : 19.4 A
 LRC : 6.3
 Rated torque : 29.7 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 280 %
 Rated speed : 3535 rpm

Moment of inertia (J) : 0.8718 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	14/04/2022			



20 HP 02 Poles 60 Hz

A

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JM TYPE PREM-EST.					
CHECKED		FRAME 254JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

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

PREVIEW
WDD



MODEL 020360T3H254JM-W40
MADE IN BRAZIL
14484487

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

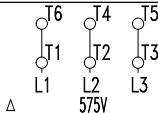


IEC 60034-1
MOD.T01#FOXON



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

PH 3	FR 254JM	HP(kW) 20(15)		Hz 60
V 575		A 19.4		IP23
NEMA NOM EFF		91.0	%	RPM 3535
ENCL ODP	DUTY CONT.		INS. CL. F Δ T 80 K	
PF 0.85		DES B	CODE G	AMB. 40°C
SF 1.25		SFA 24.3		ALT 1000 m.a.s.l.



→ 6309-Z-C3
→ 6209-Z-C3

MOBIL POLYREX EM
13 g 20000 h

220 Lbs