

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump NEMA Premium Efficiency Three-Phase Product code : 14270421
Catalog # : 06018OT3E364JP-W40

Frame	: 364/5JP	Locked rotor time	: 34s (cold) 19s (hot)
Output	: 60 HP (45 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 140/69.9 A	Protection degree	: IP23
L. R. Amperes	: 909/454 A	Cooling method	: IC01 - ODP
LRC	: 6.5x(Code G)	Mounting	: F-1
No load current	: 49.4/24.7 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 69.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 177 ft.lb	Approx. weight ³	: 770 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 15.6 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.4	94.5	95.0	95.0	Max. traction	: 1251 lb
Power Factor	0.48	0.73	0.82	0.85	Max. compression	: 2021 lb

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6212 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	27 g	13 g
Lubricant type	:	Mobil Polyrex EM	

Notes
USABLE @208V 155A SF 1.15 SFA 178A

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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Date	10/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

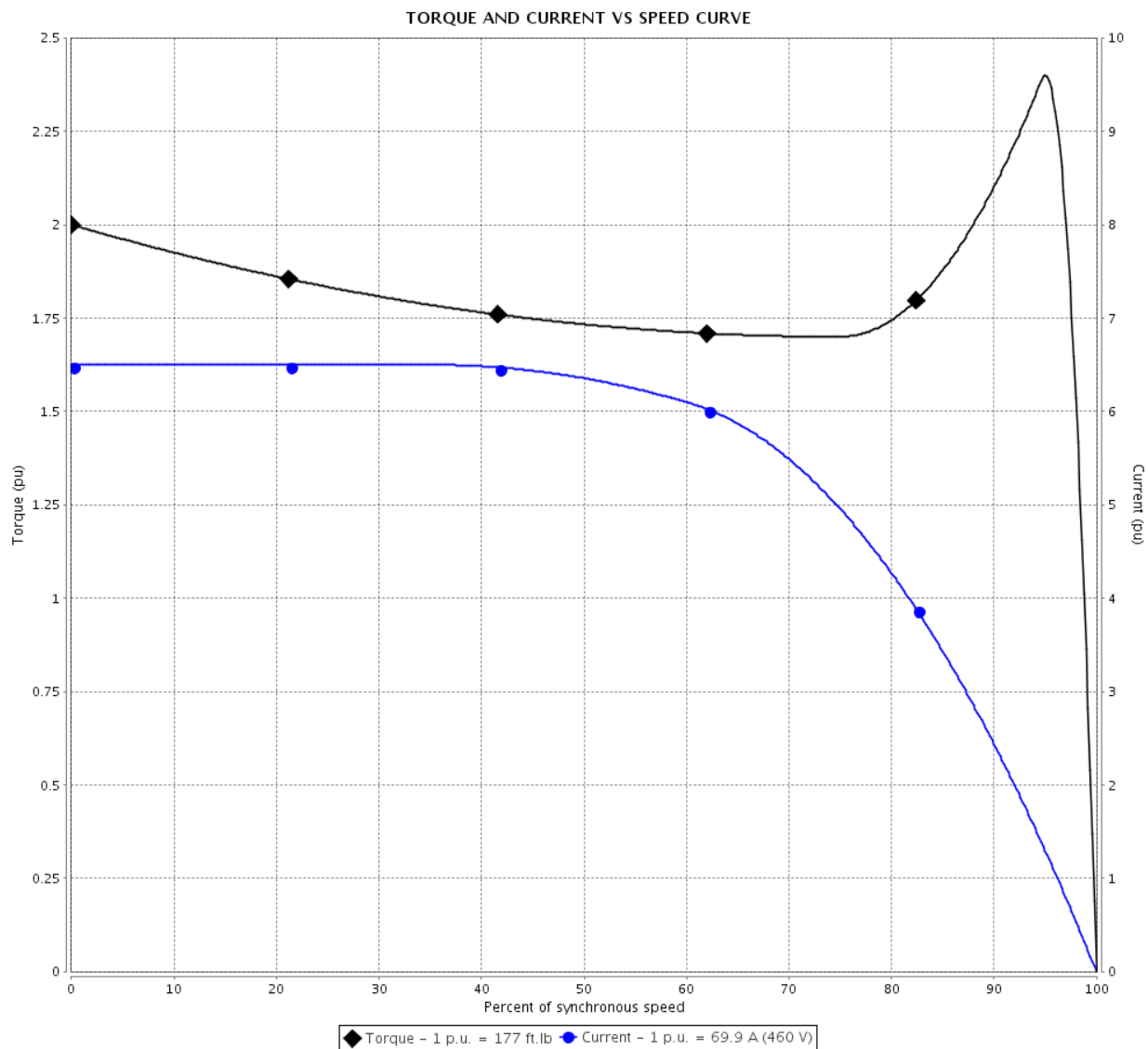


Customer :

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Efficiency Three-Phase

Product code : 14270421

Catalog # : 06018OT3E364JP-W40



Performance : 230/460 V 60 Hz 4P

Rated current : 140/69.9 A
 LRC : 6.5
 Rated torque : 177 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 240 %
 Rated speed : 1780 rpm

Moment of inertia (J) : 15.6 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
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 Design : B

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Checked by				
Date	10/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

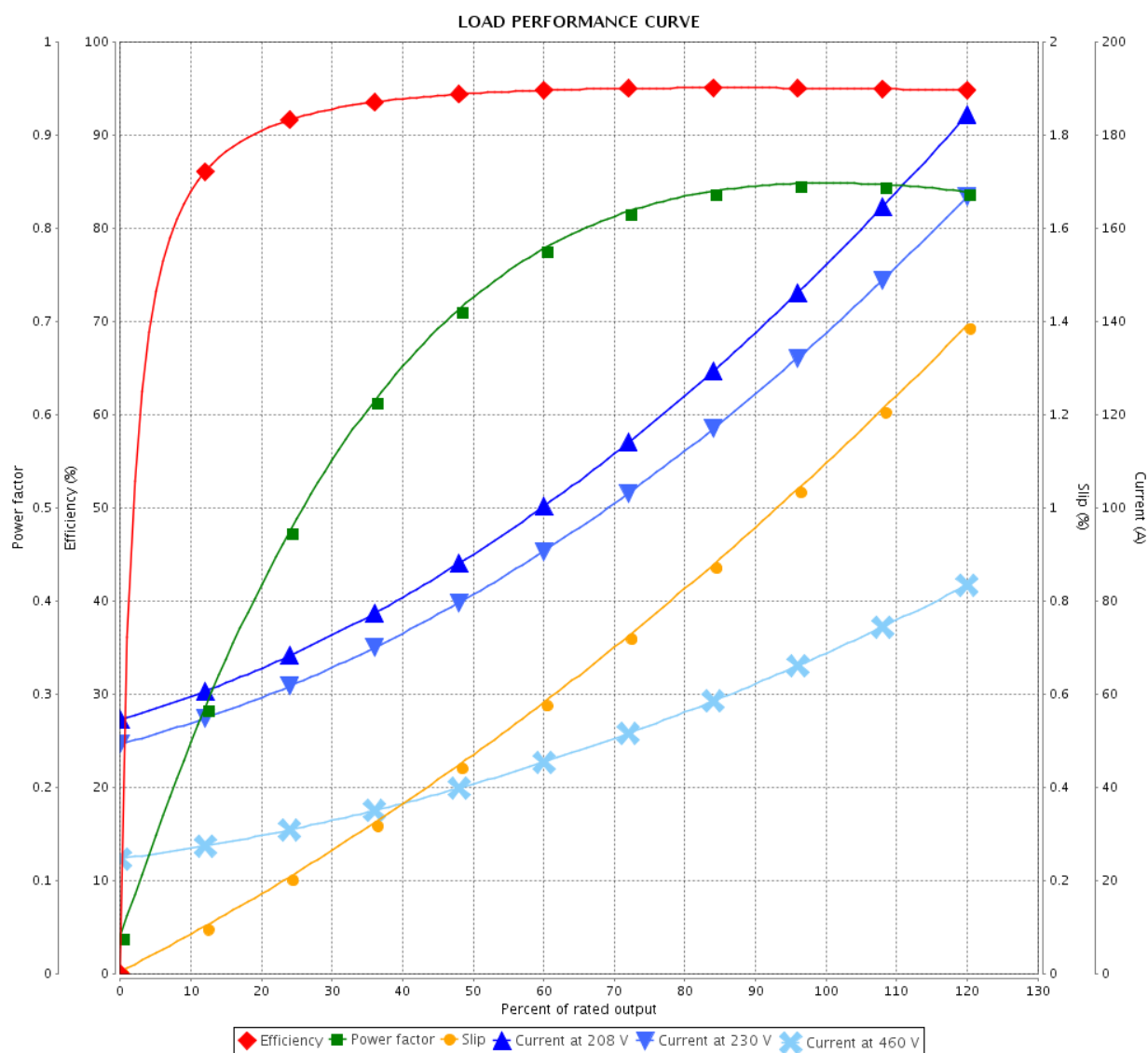


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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Heating constant

Cooling constant

Rev.

Changes Summary

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Checked

Date

Performed by

Checked by

Date

10/04/2020

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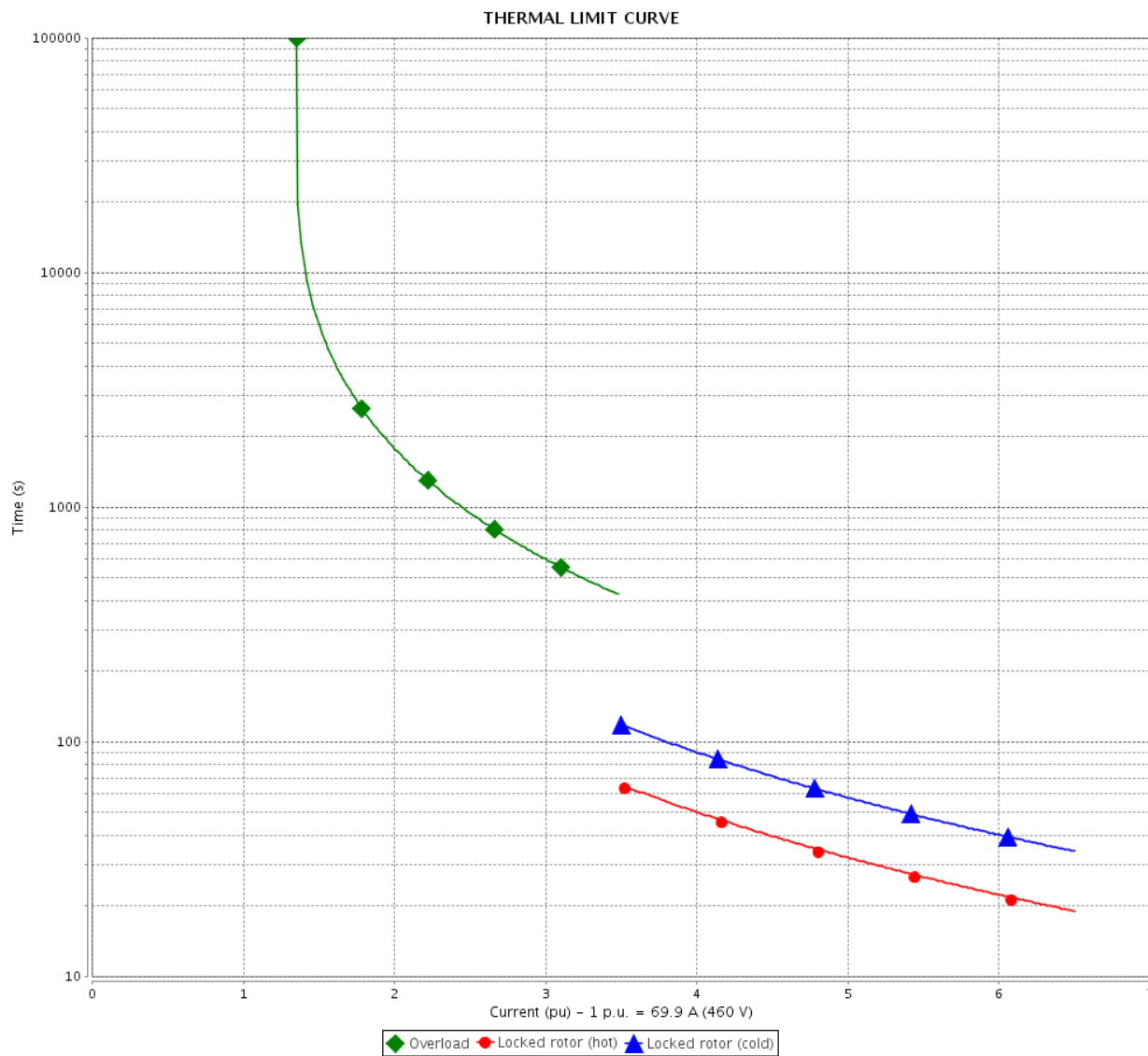
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

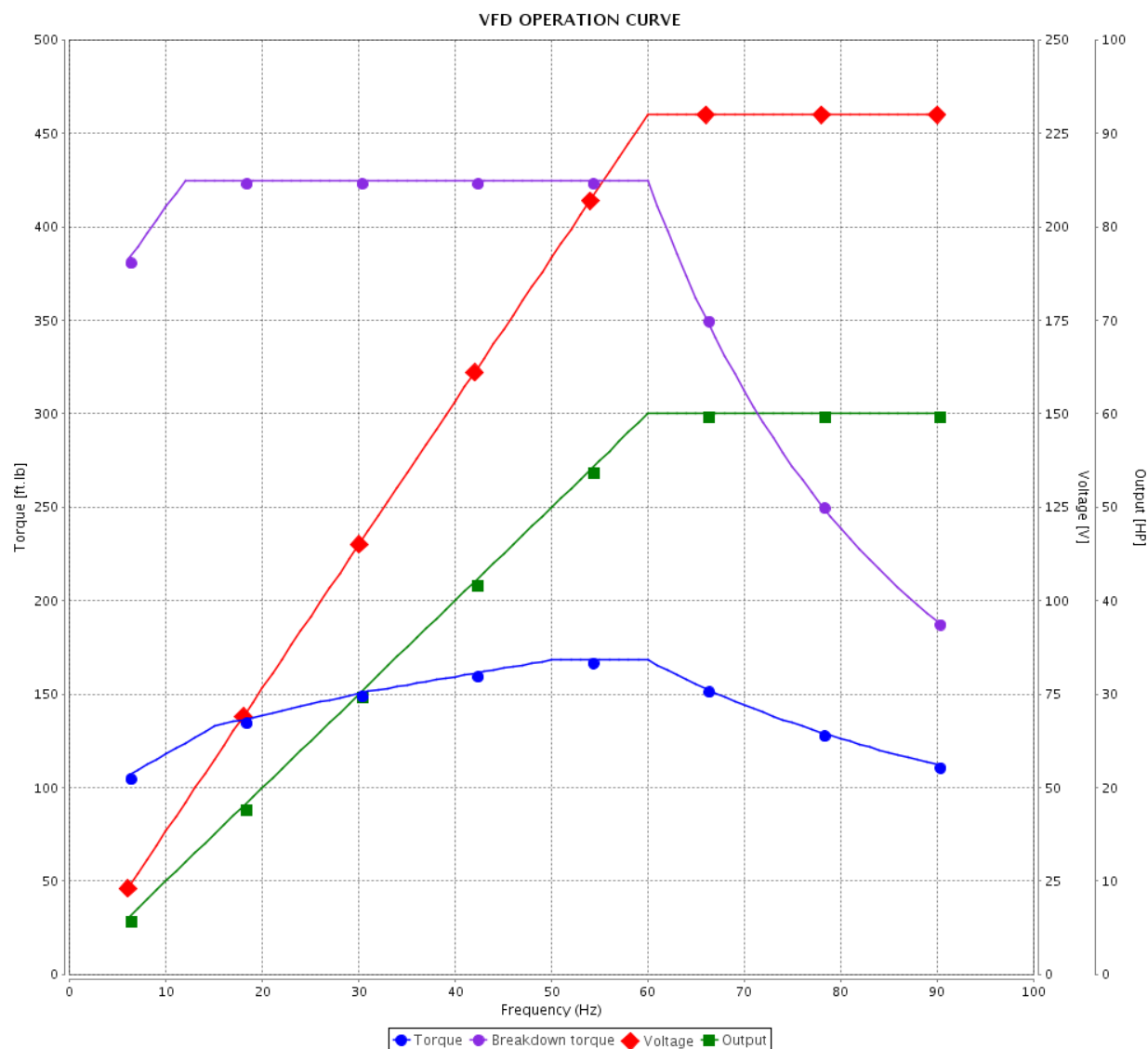


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Efficiency Three-Phase

Product code : 14270421

Catalog # : 06018OT3E364JP-W40

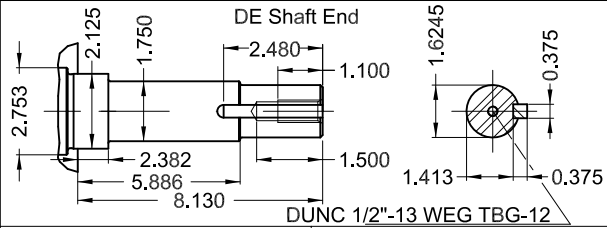
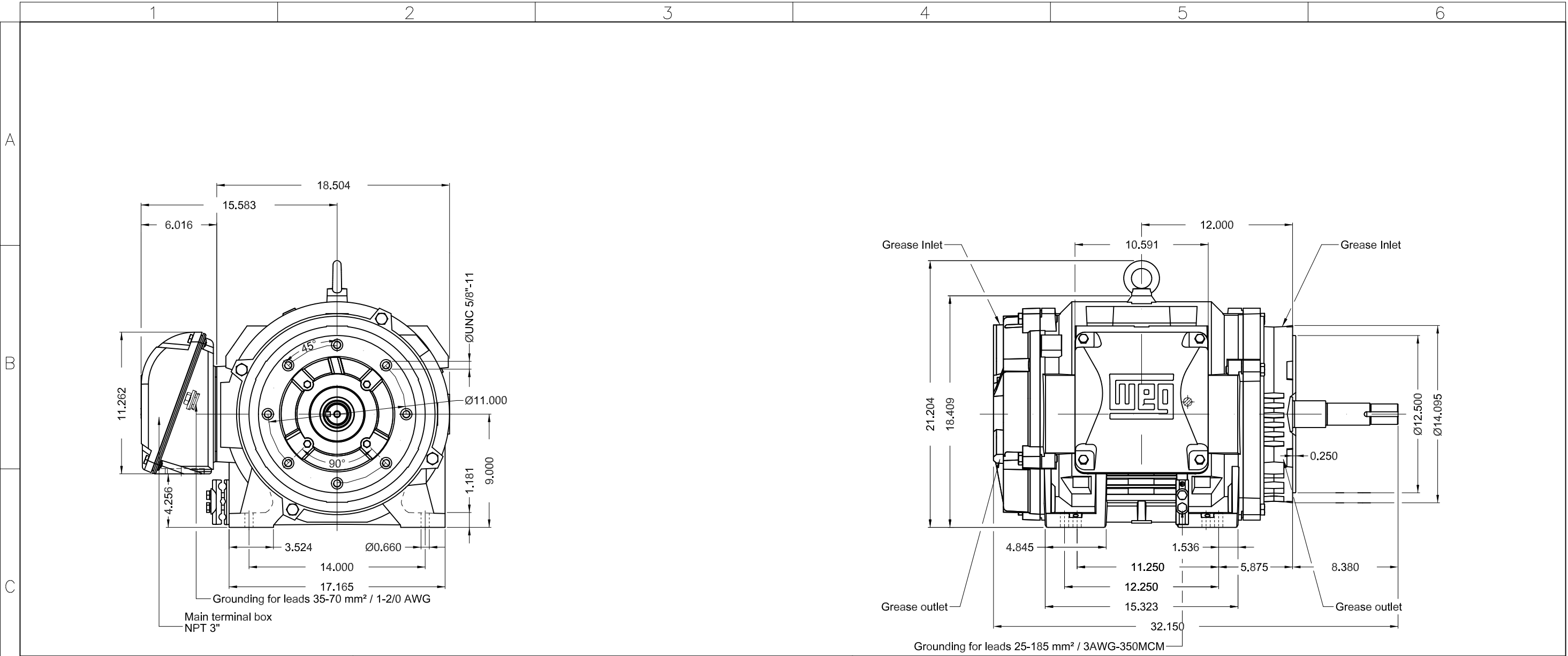


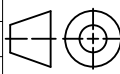

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60 HP 04 Poles 60Hz										A				
										1:8				
ECM		LOC		SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER		
EXECUTED		PIRWUSER			THREE PHASE W40 MOTOR NEMA PREMIUM EFF FRAME 364/5JP IP23 ODP					PREVIEW WDD				
CHECKED														
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)

MODEL 060180T3E364JP-W40
MADE IN BRAZIL
14270421

W40 NEMA
CC029A Premium
Inverter Duty Motor

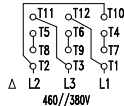
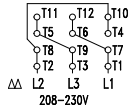


IEC 60034-1
MOD.T01#FOXON



For 60Hz use on PWM, VT 1000:1, CT 2:1, 1.0SF

PH 3	FR 364/5JP	HP(kW) 60.0(45.0)	Hz 60
V 230/460	A 140/69.9	RPM 1780	DES B
NEMA NOM EFF 95.0 %	INS. CL. F Δ T 80 K	IP23	
ENCL ODP	DUTY CONT.	AMB. 40°C	
CODE G	PF 0.85	SF 1.25	SFA 175/87.4
USABLE @208V 155 A	SF 1.15	SFA 178	
50HP 37kW 50Hz 380V 69.6A 1480RPM SF1.00 EFF 93.9% (IE3)			



→ 6314-C3(27g)
→ 6212-Z-C3(13g)

MOBIL POLYREX EM
20000 h

ALT 1000 m.a.s.l. 769 Lbs