

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line	: NEMA Premium Efficiency Three-Phase			
Product code :	13827809			
Catalog # :	45018ET3GKD586/7-W22			
Frame : 586/7T Output : 450 HP (330 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 460 V Rated current : 501 A L. R. Amperes : 3758 A LRC : 7.5x(Code H) No load current : 160 A Rated speed : 1786 rpm Slip : 0.78 % Rated torque : 1320 ft.lb Locked rotor torque : 240 % Breakdown torque : 250 % Insulation class : F Service factor : 1.15 Design : A	Locked rotor time : 45s (cold) 25s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Noise level ² : 78.0 dB(A) Starting method : Direct On Line Approx. weight ³ : 3912 lb			
Output	25% 50% 75% 100%			
Efficiency (%)	0.000 95.8 96.2 96.2			
Power Factor	0.00 0.75 0.83 0.86			
Foundation loads				
Max. traction	: 4945 lb			
Max. compression	: 8857 lb			
Bearing type	: <u>Drive end</u> NU-322 C3 <u>Non drive end</u> 6319 C3			
Sealing	: Taconite Labyrinth Taconite Labyrinth			
Lubrication interval	: 4000 h 8000 h			
Lubricant amount	: 60 g 45 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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Space heater information

Voltage: 200 - 240 V

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TORQUE AND CURRENT VS SPEED CURVE



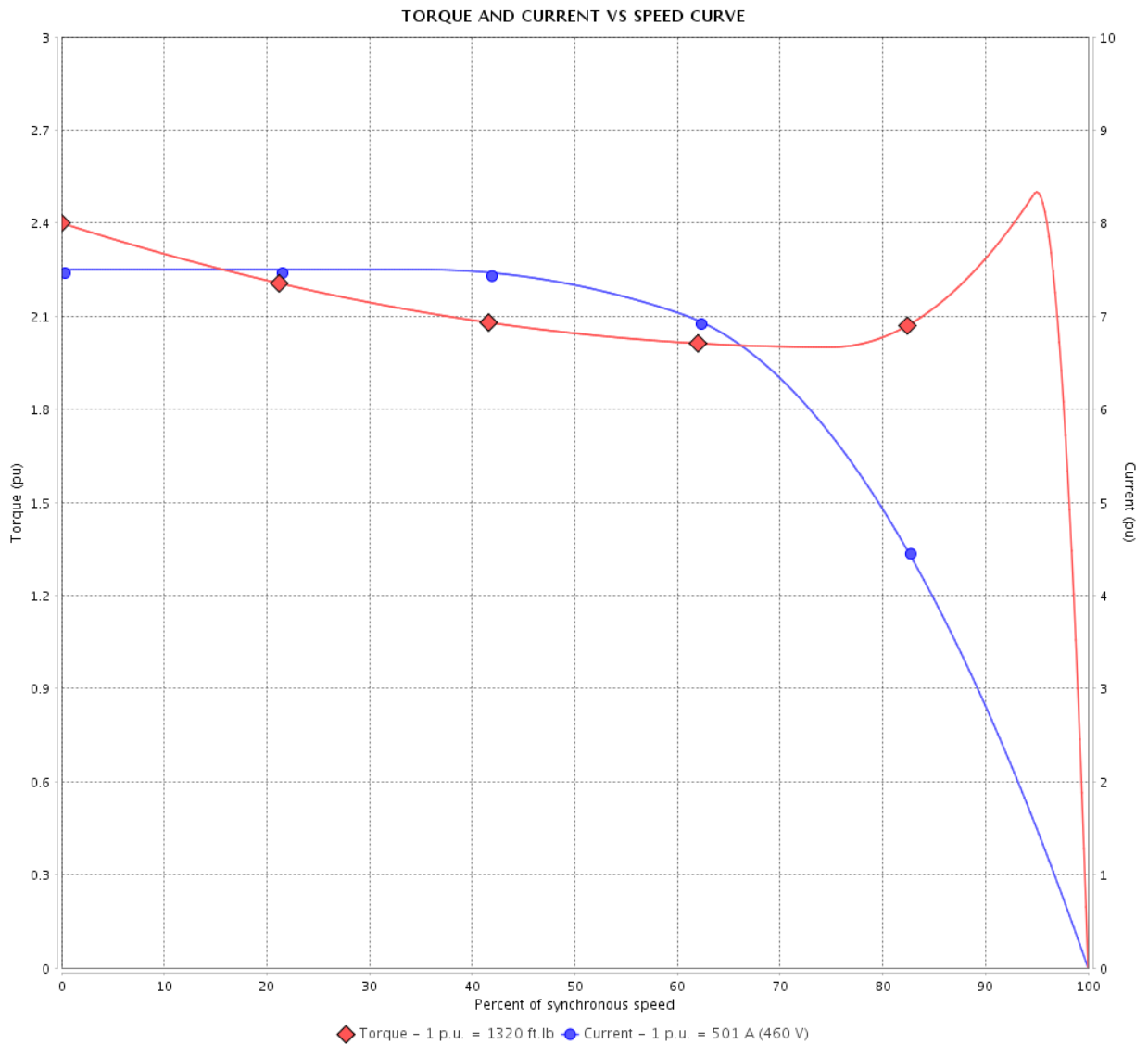
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Performance : 460 V 60 Hz 4P

Rated current : 501 A
 LRC : 7.5
 Rated torque : 1320 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 250 %
 Rated speed : 1786 rpm

Moment of inertia (J)
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Locked rotor time : 45s (cold) 25s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

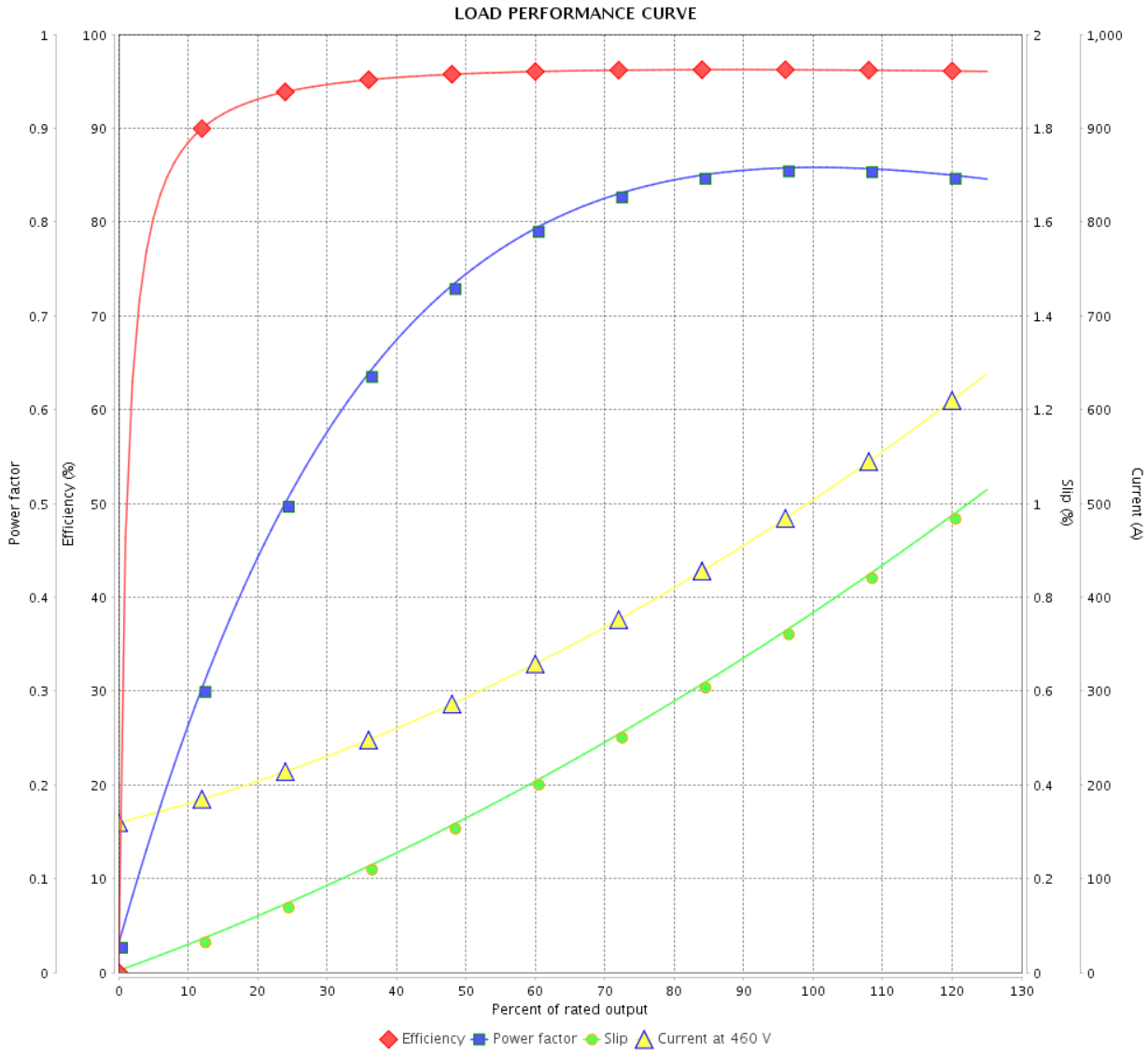


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LRC : 7.5	Duty cycle : Cont.(S1)
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Locked rotor torque : 240 %	Service factor : 1.15
Breakdown torque : 250 %	Temperature rise : 80 K
Rated speed : 1786 rpm	Design : A

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THERMAL LIMIT CURVE

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Heating constant

Cooling constant

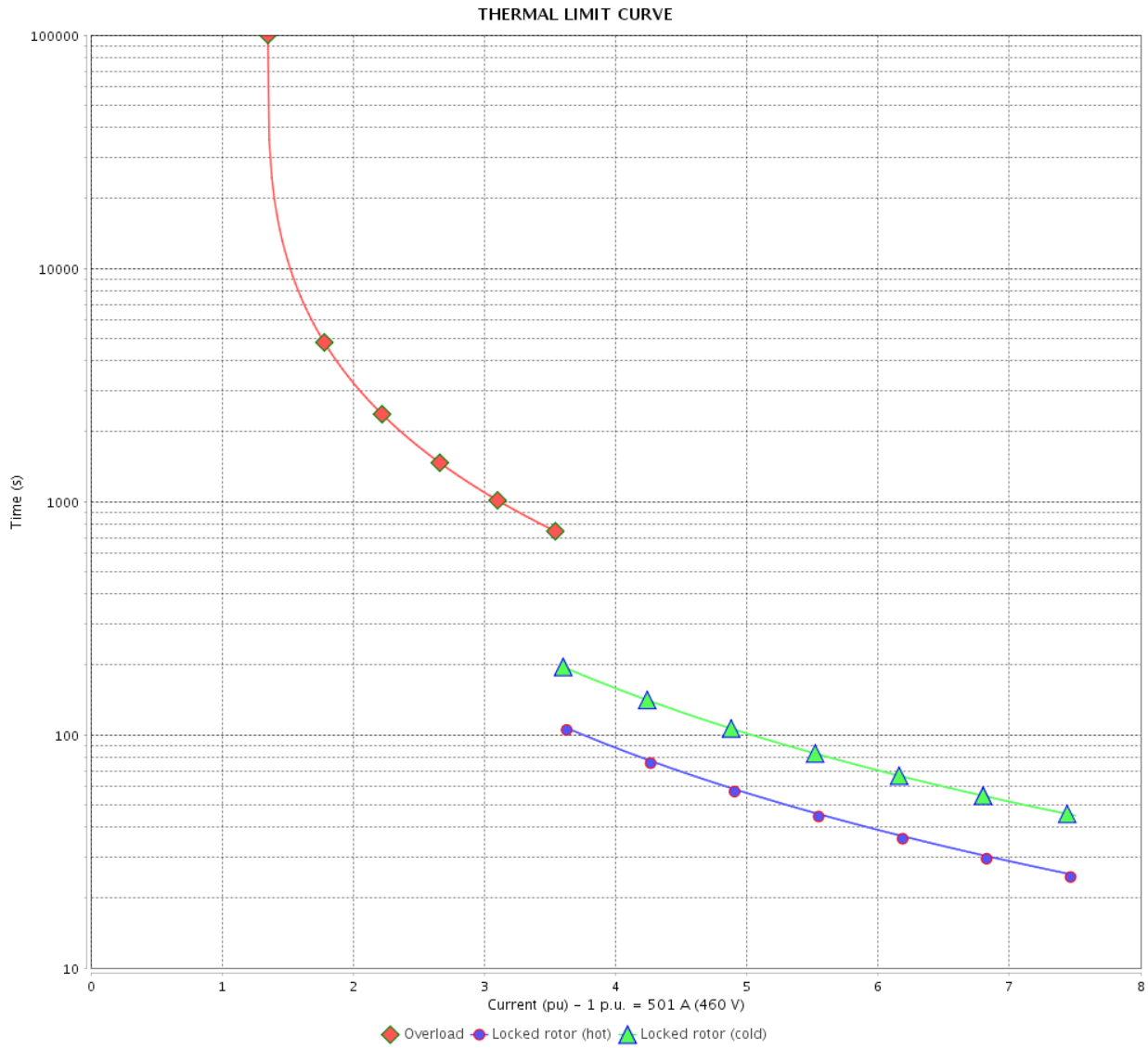
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

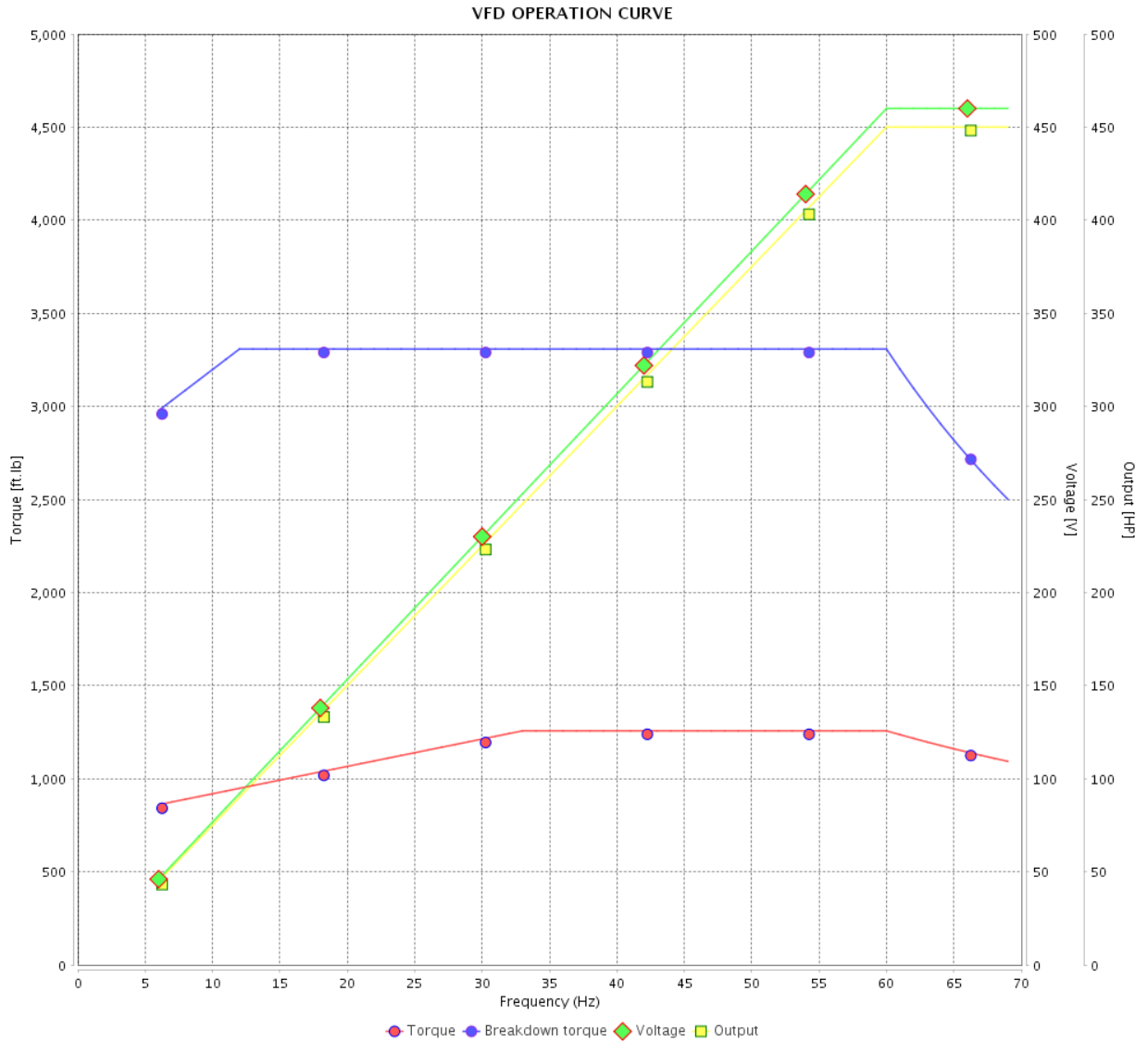


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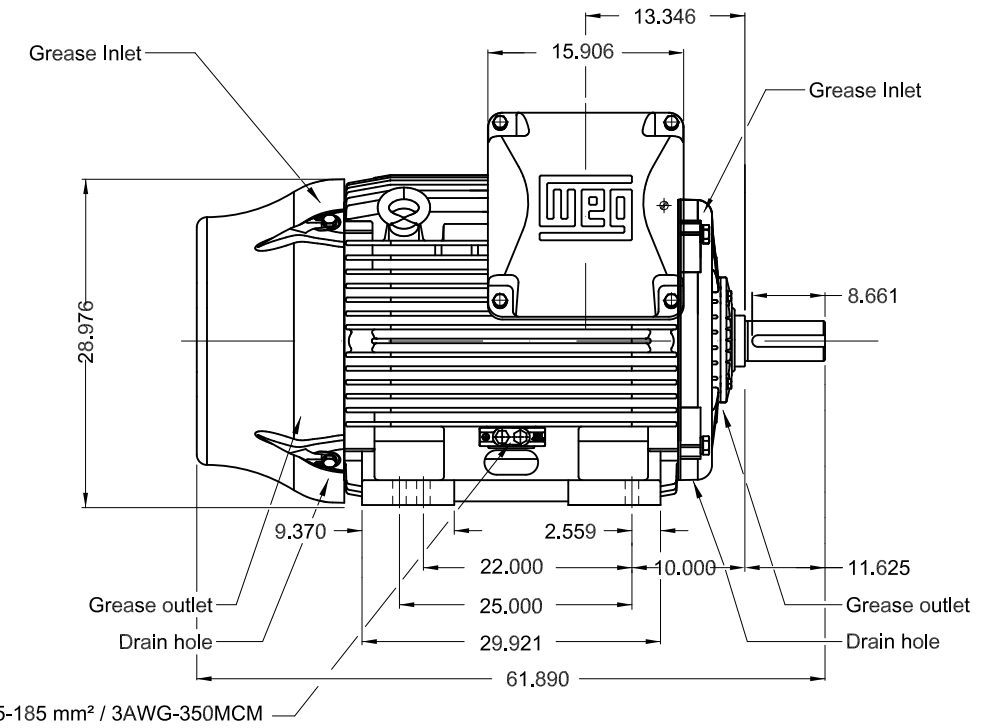
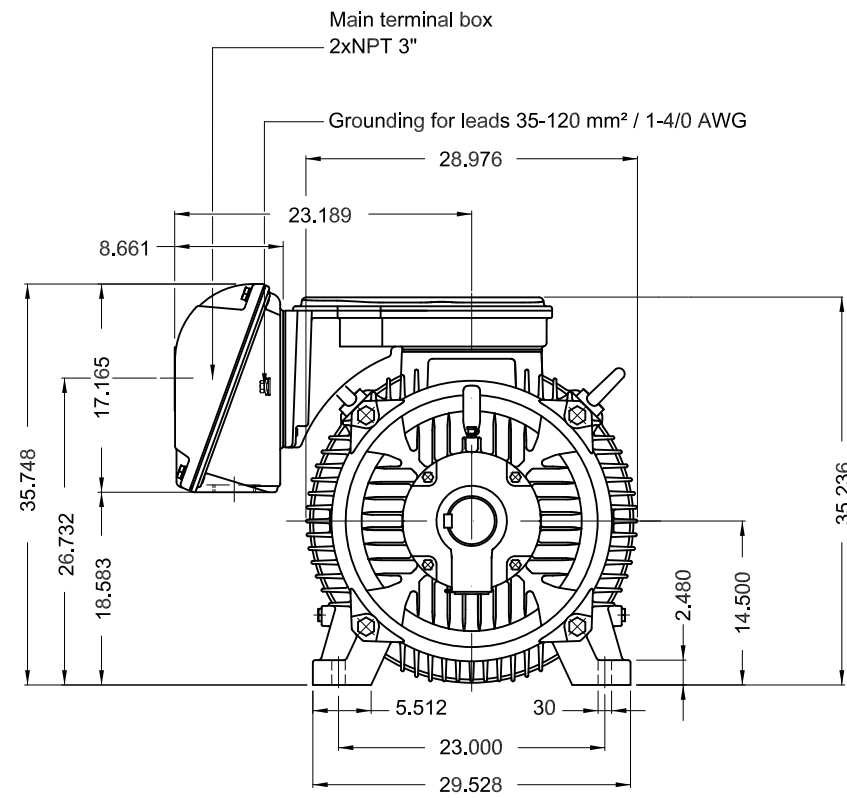


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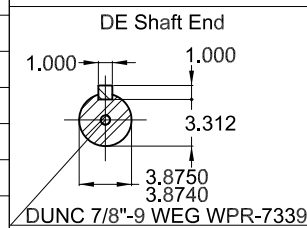
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- Design A
- DE roller bearing
- Shaft locking device
- NDE endshield with electrically insulated bearing hub
- Color RAL 5009
- Painting plan 203A
- Mounting NEMA F-1
- Mounting B3R(D)



450 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER		THREE PH. MOTOR W22 PREM. EFF.				PREVIEW WDD		SHEET 1 / 1	XME A3
CHECKED			FRAME 586/7T IP55 TEFC							
RELEASED										
REL DT.			WMO	Jaragua do Sul	Product Engineering					



NEMA
Premium
W22



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



Class I, Div 2, Gr A, B, C and D - T3
Class I, Zone 2, IIC - T3
Class II, Div 2, Gr F and G - T3C
For use on PWM: Gr. A, B, C, D and F,
VT 1000:1, CT 6:1, 1.00SF - T3

MODEL 45018ET3GKD586/7-W22

Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 586/7T 1000m.a.s.l. IP55 TEFC 4232lb

V 460

A 501

HP 450

kW 330

SF 1.15

SFA 576

RPM 1786

PF 0.86

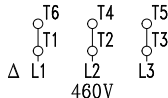
AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 96.2%

DUTY CONT.

DES A Code H

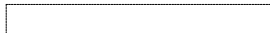


→ NU-322-C3 (60g)

→ 6319-C3 (45g)



MOBIL POLYREX EM (4000h)



MADE IN BRAZIL
13827809