

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer		: 02518ST3QIE284TC-W22							
Product line		: W22 IEEE 841 NEMA Premium Efficiency Three-Phase				Product code :		12424294	
						Catalog # :		02518ST3QIE284TC-W22	
Frame		: 284/6TC				Locked rotor time		: 43s (cold) 24s (hot)	
Output		: 25 HP (18.5 kW)				Temperature rise		: 80 K	
Poles		: 4				Duty cycle		: Cont.(S1)	
Frequency		: 60 Hz				Ambient temperature		: -20°C to +40°C	
Rated voltage		: 460 V				Altitude		: 1000 m.a.s.l.	
Rated current		: 29.5 A				Protection degree		: IP55	
L. R. Amperes		: 183 A				Cooling method		: IC411 - TEFC	
LRC		: 6.2x(Code G)				Mounting		: F-1	
No load current		: 10.5 A				Rotation ¹		: Both (CW and CCW)	
Rated speed		: 1765 rpm				Noise level ²		: 63.0 dB(A)	
Slip		: 1.94 %				Starting method		: Direct On Line	
Rated torque		: 74.4 ft.lb				Approx. weight ³		: 425 lb	
Locked rotor torque		: 240 %							
Breakdown torque		: 270 %							
Insulation class		: F							
Service factor		: 1.25							
Moment of inertia (J)		: 5.11 sq.ft.lb							
Design		: B							
Output	25%	50%	75%	100%	Foundation loads				
Efficiency (%)	91.7	92.4	93.0	93.6	Max. traction : 807 lb				
Power Factor	0.46	0.70	0.80	0.84	Max. compression : 1232 lb				
		<u>Drive end</u>				<u>Non drive end</u>			
Bearing type		: 6311 C3				6211 C3			
Sealing		: Inpro/Seal				Inpro/Seal			
Lubrication interval		: 20000 h				20000 h			
Lubricant amount		: 18 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		Date	
Performed by									
Checked by									
Date	01/05/2020					Page 1 / 6		Revision	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

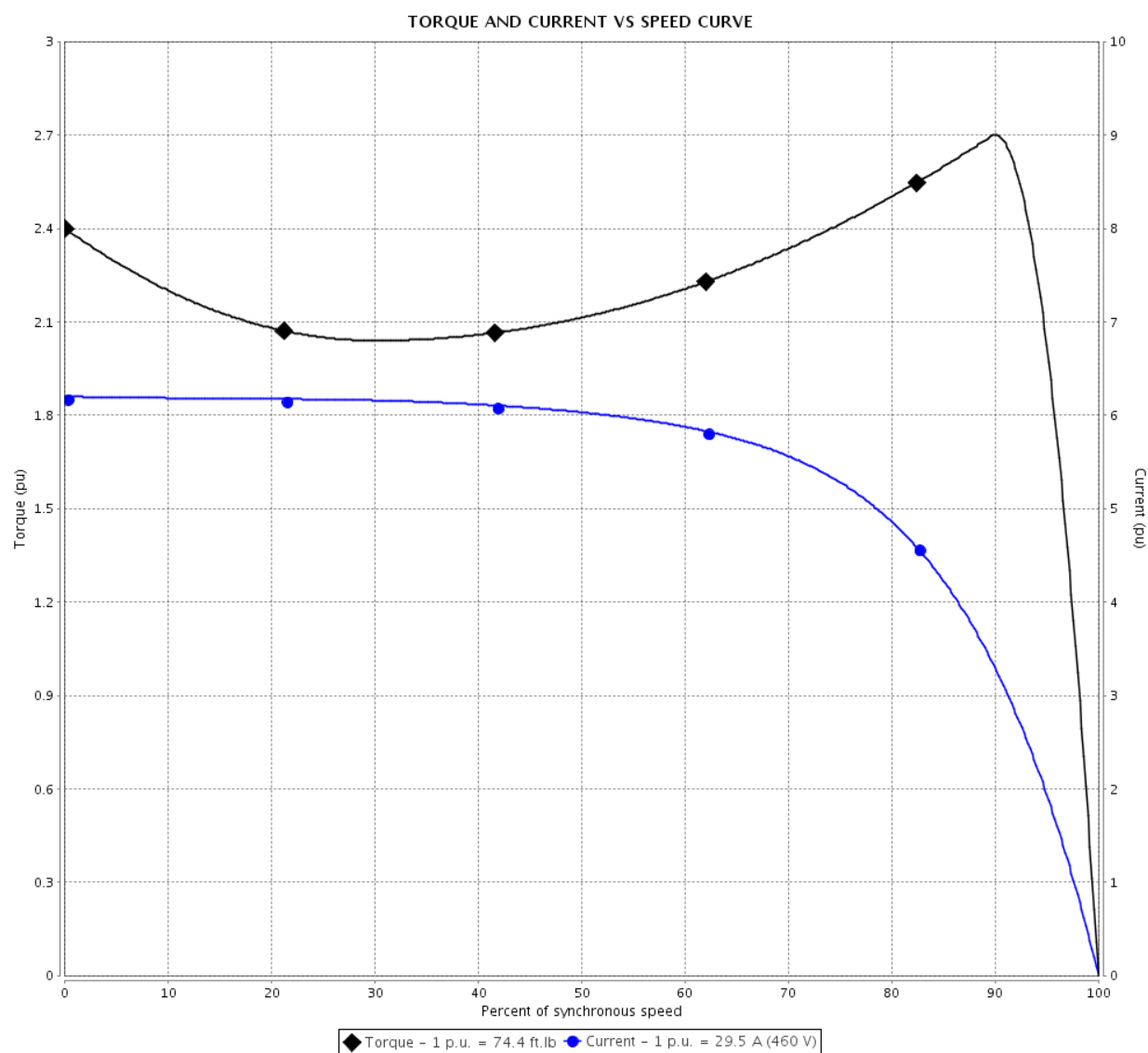


Customer : 02518ST3QIE284TC-W22

Product line : W22 IEEE 841 NEMA Premium
Efficiency Three-Phase

Product code : 12424294

Catalog # : 02518ST3QIE284TC-W22



Performance : 460 V 60 Hz 4P

Rated current : 29.5 A
LRC : 6.2
Rated torque : 74.4 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 270 %
Rated speed : 1765 rpm

Moment of inertia (J) : 5.11 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Locked rotor time : 43s (cold) 24s (hot)

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Date	01/05/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

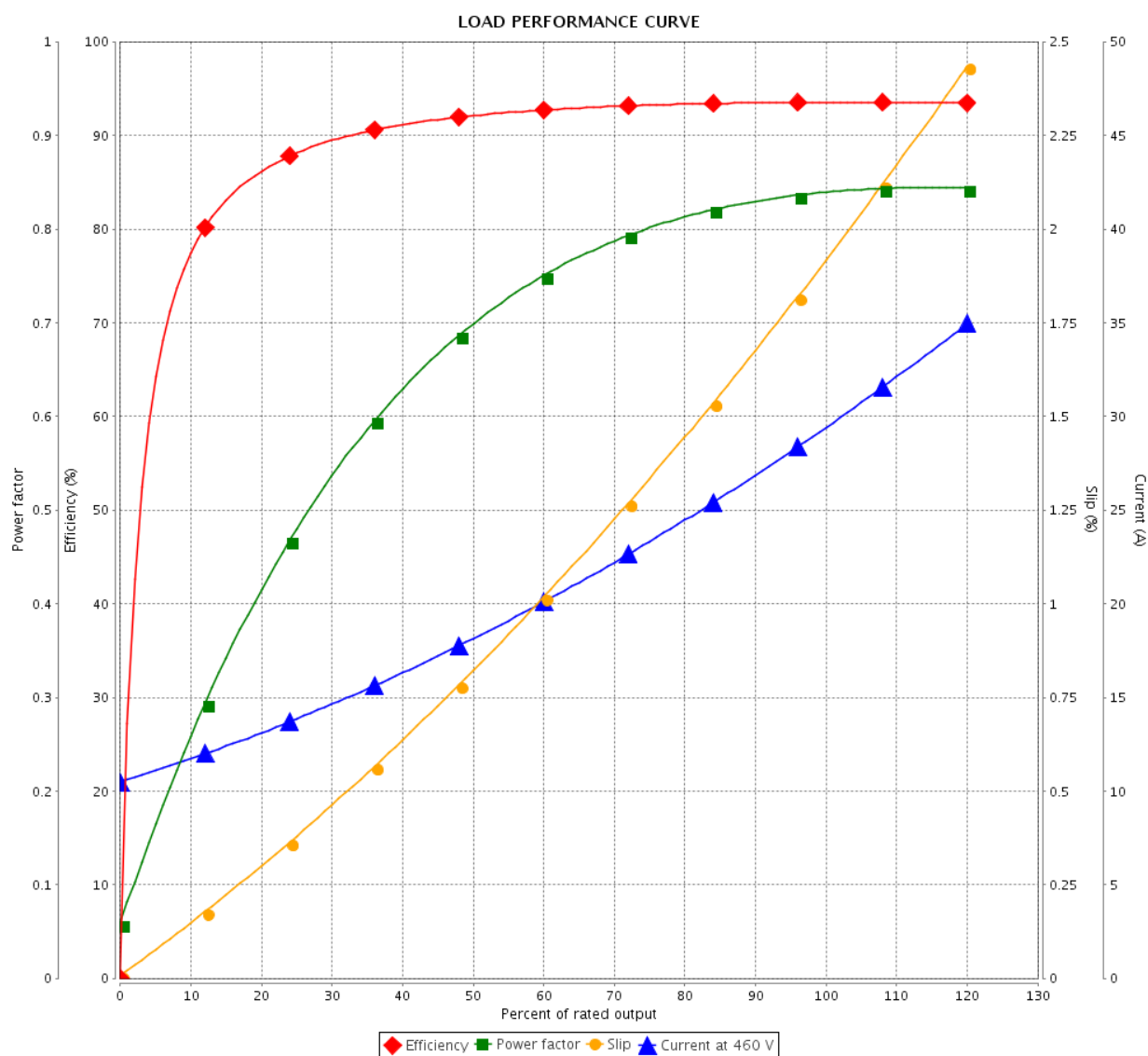


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THERMAL LIMIT CURVE

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Rated current	: 29.5 A	Moment of inertia (J)	: 5.11 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 74.4 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Heating constant

Cooling constant

Rev.

Changes Summary

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Checked

Date

Performed by

Checked by

Date

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Revision

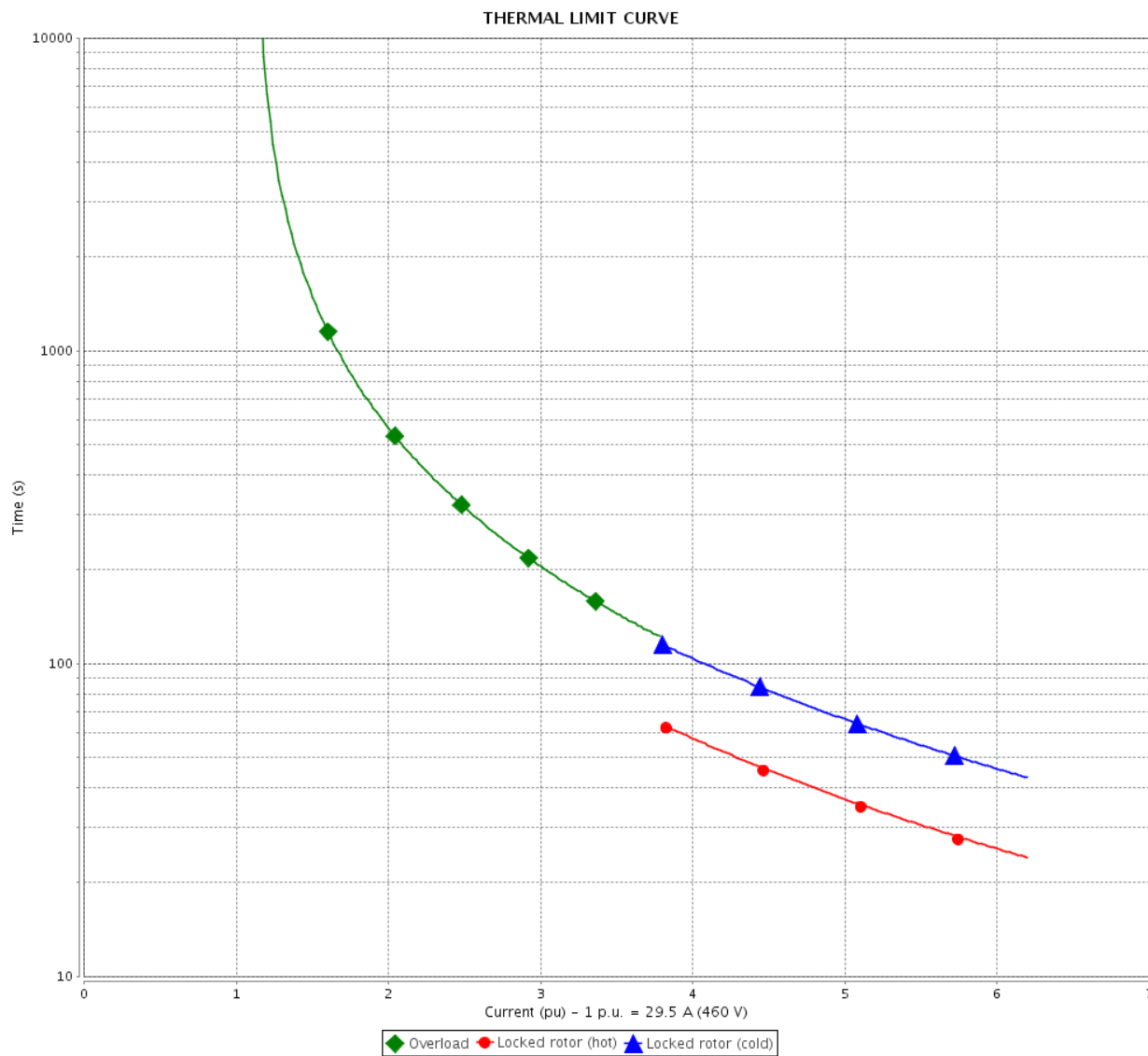
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer

: 02518ST3QIE284TC-W22



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

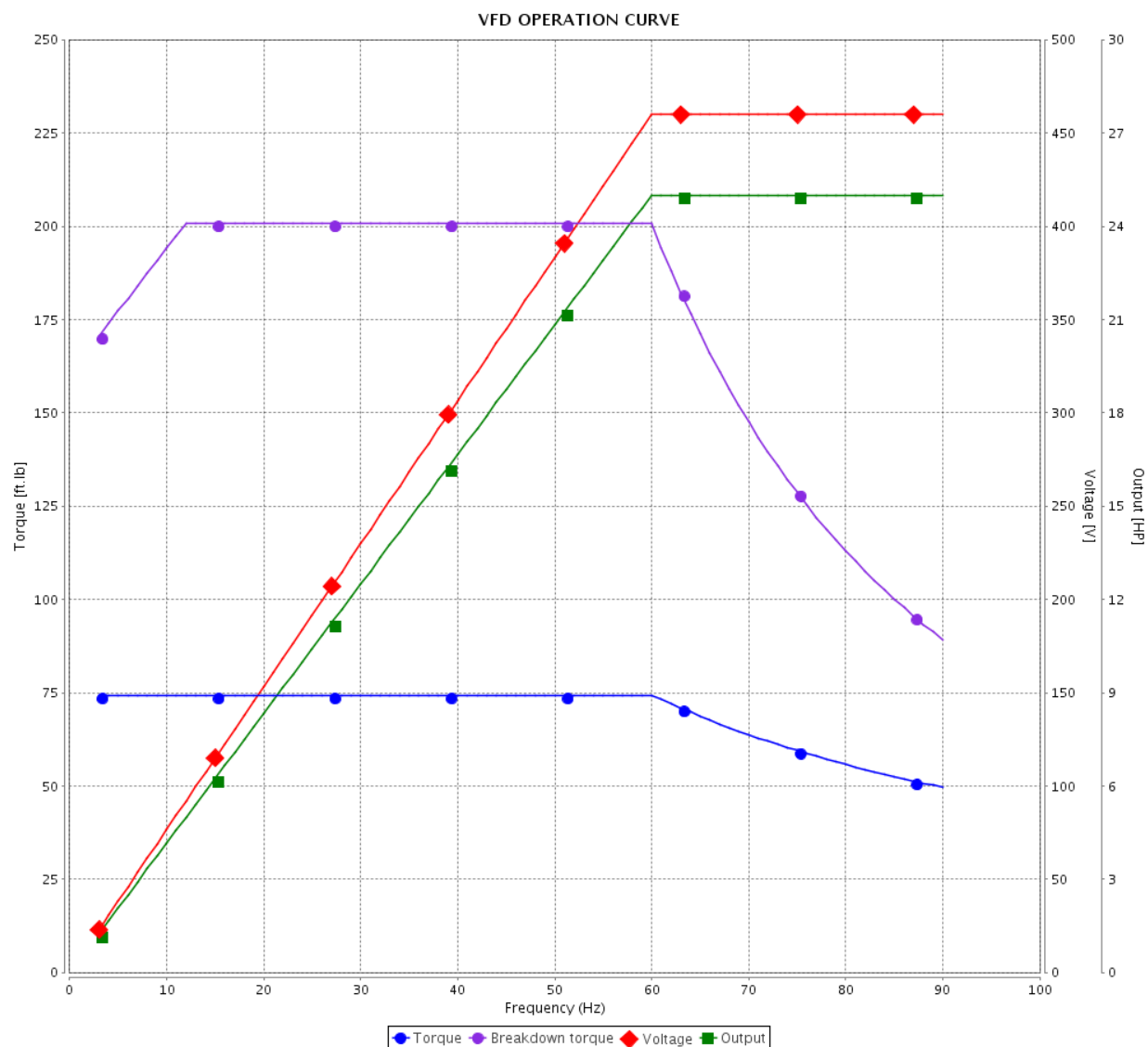


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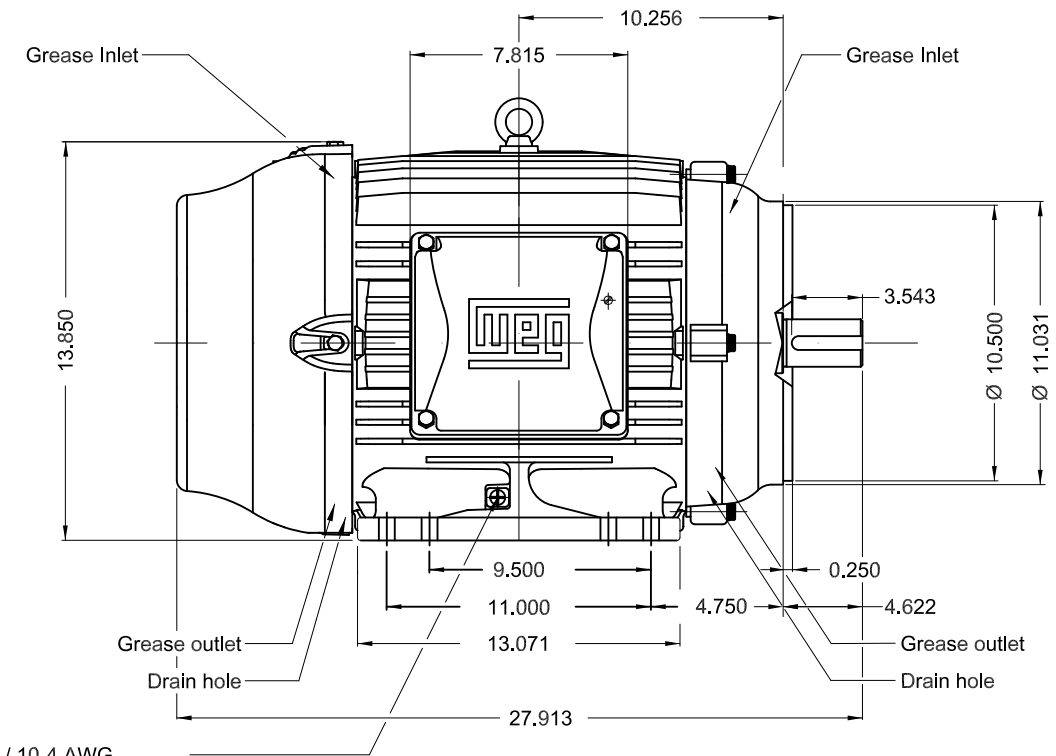


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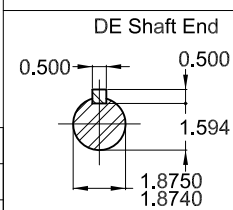
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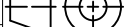

25 HP 04 Poles 60Hz

Dimensions in inches

2017



Color RAL 5009
Painting plan 202E
Mounting B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER	
EXECUTED	PIRWBUSER		THREE PH. W22 NEMA P.EFF MOTOR IEEE841 FRAME 284/6TC IP55 TEFC			PREVIEW WDD				
CHECKED										
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1				