

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	12787962
		Catalog # :	02536OT3E256JM-S
Frame	: 254/6JM	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 194 lb
Design	: B	Moment of inertia (J)	: 0.9155 sq.ft.lb
Output [HP]	25	25	25
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	58.2/29.1	70.6-61.0/35.3	33.0
L. R. Amperes [A]	367/183	374-323/187	208
LRC [A]	6.3x(Code G)	5.3x(Code E)	6.3x(Code G)
No load current [A]	22.8/11.4	22.3-19.3/11.2	14.1
Rated speed [RPM]	3530	2905	2920
Slip [%]	1.94	3.17	2.67
Rated torque [ft.lb]	37.2	45.2	45.0
Locked rotor torque [%]	180	150	180
Breakdown torque [%]	290	220	260
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	16s (cold) 9s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level <sup>2</sup>	70.0 dB(A)	68.0 dB(A)	68.0 dB(A)
Efficiency (%)	25%		
	50%	91.0	91.1
	75%	91.7	90.3
	100%	91.7	88.5
Power Factor	25%		
	50%	0.73	0.80
	75%	0.83	0.87
	100%	0.87	0.90
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3	Foundation loads	
Sealing	: Without Bearing Seal Without Bearing Seal	Max. traction	: 464 lb
		Max. compression	: 657 lb
Lubrication interval	: 20000 h 20000 h		
Lubricant amount	: 13 g 8 g		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 64.3A SF 1.00 SFA 64.3A			
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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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



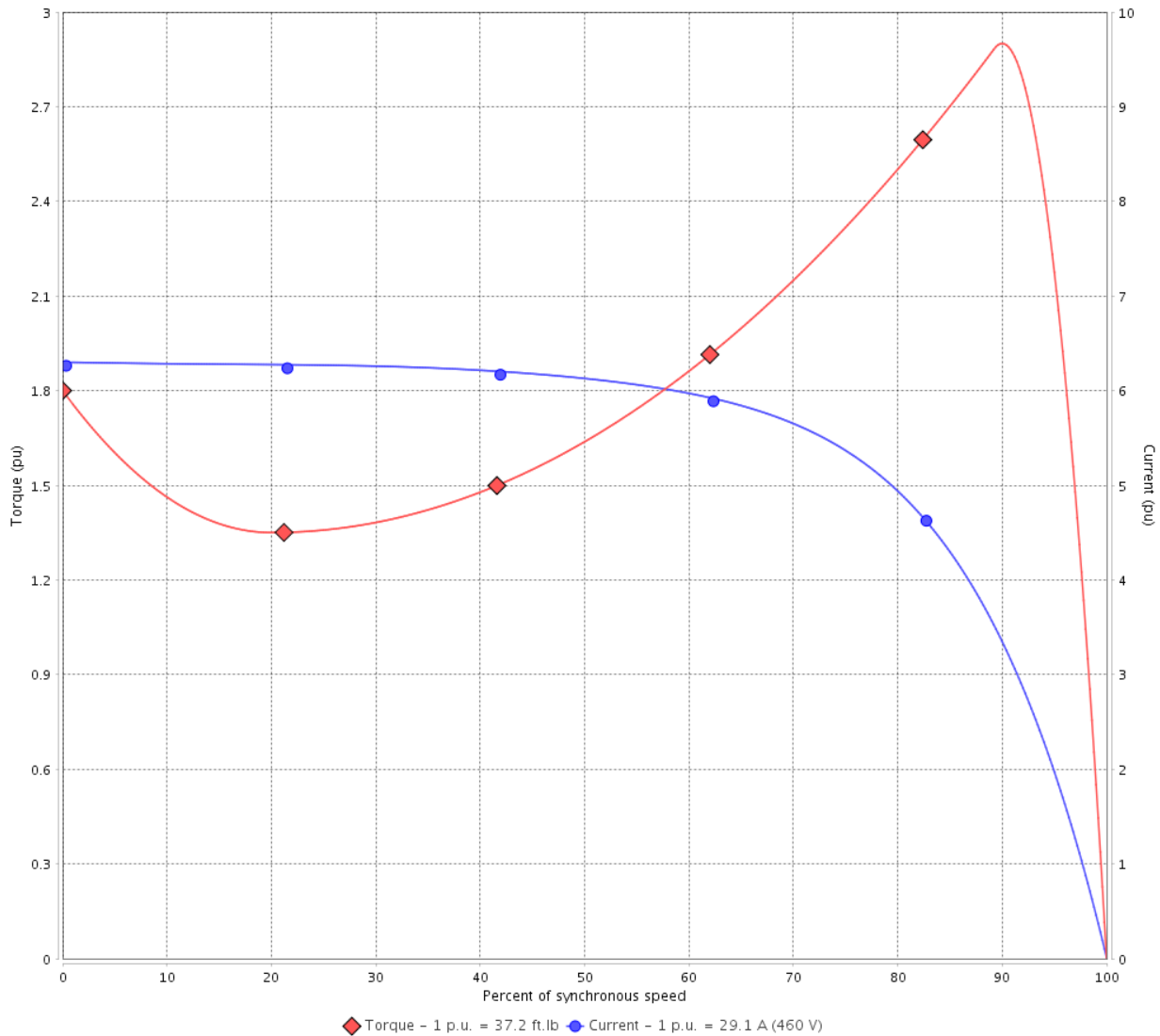
Customer :

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 12787962

Catalog # : 02536OT3E256JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 58.2/29.1 A	Moment of inertia (J)	: 0.9155 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 37.2 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3530 rpm	Design	: B

Locked rotor time : 16s (cold) 9s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



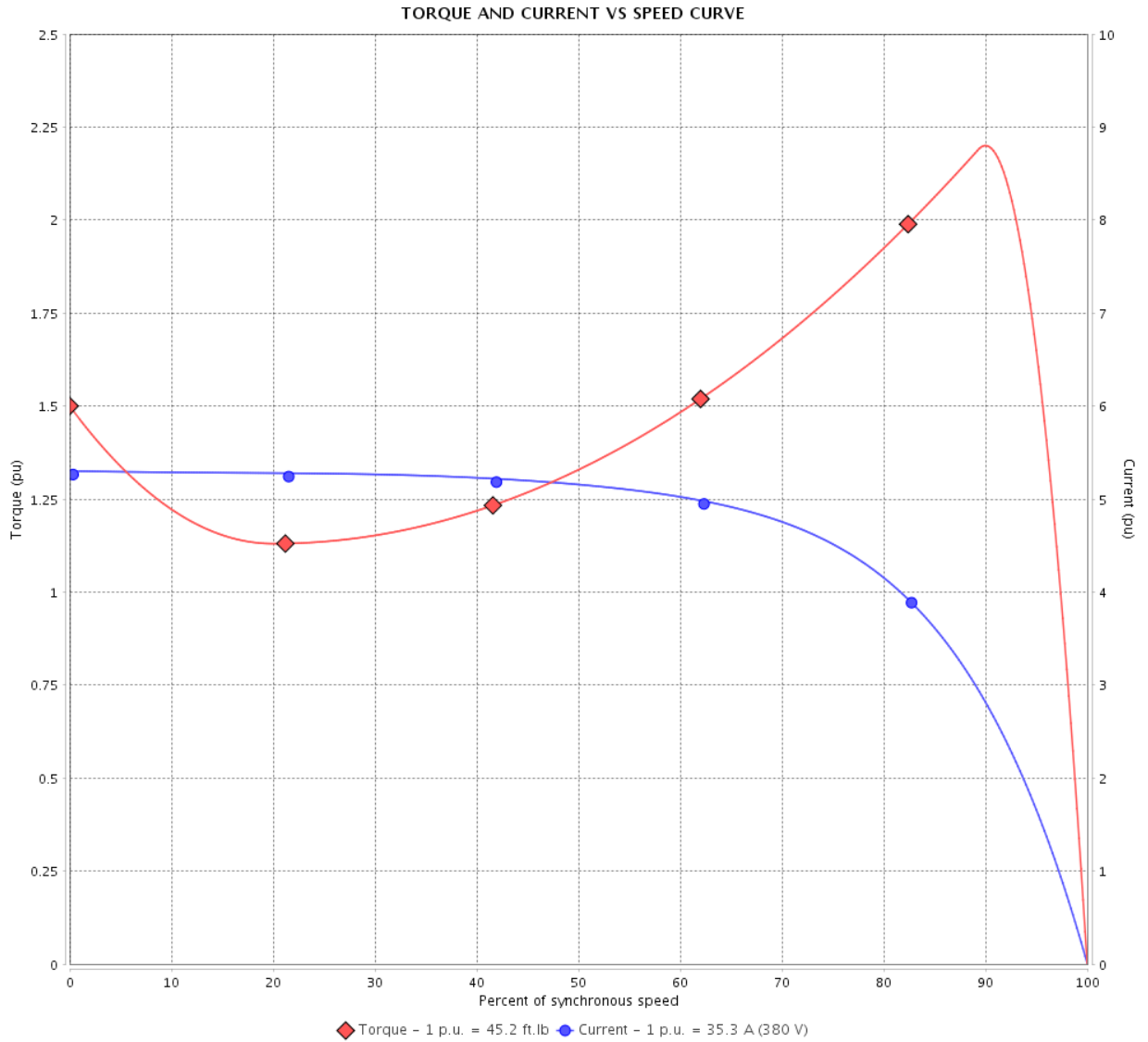
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12787962

Catalog # : 02536OT3E256JM-S



Performance : 190-220/380 V 50 Hz 2P

Rated current	: 70.6-61.0/35.3 A	Moment of inertia (J)	: 0.9155 sq.ft.lb
LRC	: 5.3	Duty cycle	: Cont.(S1)
Rated torque	: 45.2 ft.lb	Insulation class	: F
Locked rotor torque	: 150 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 2905 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



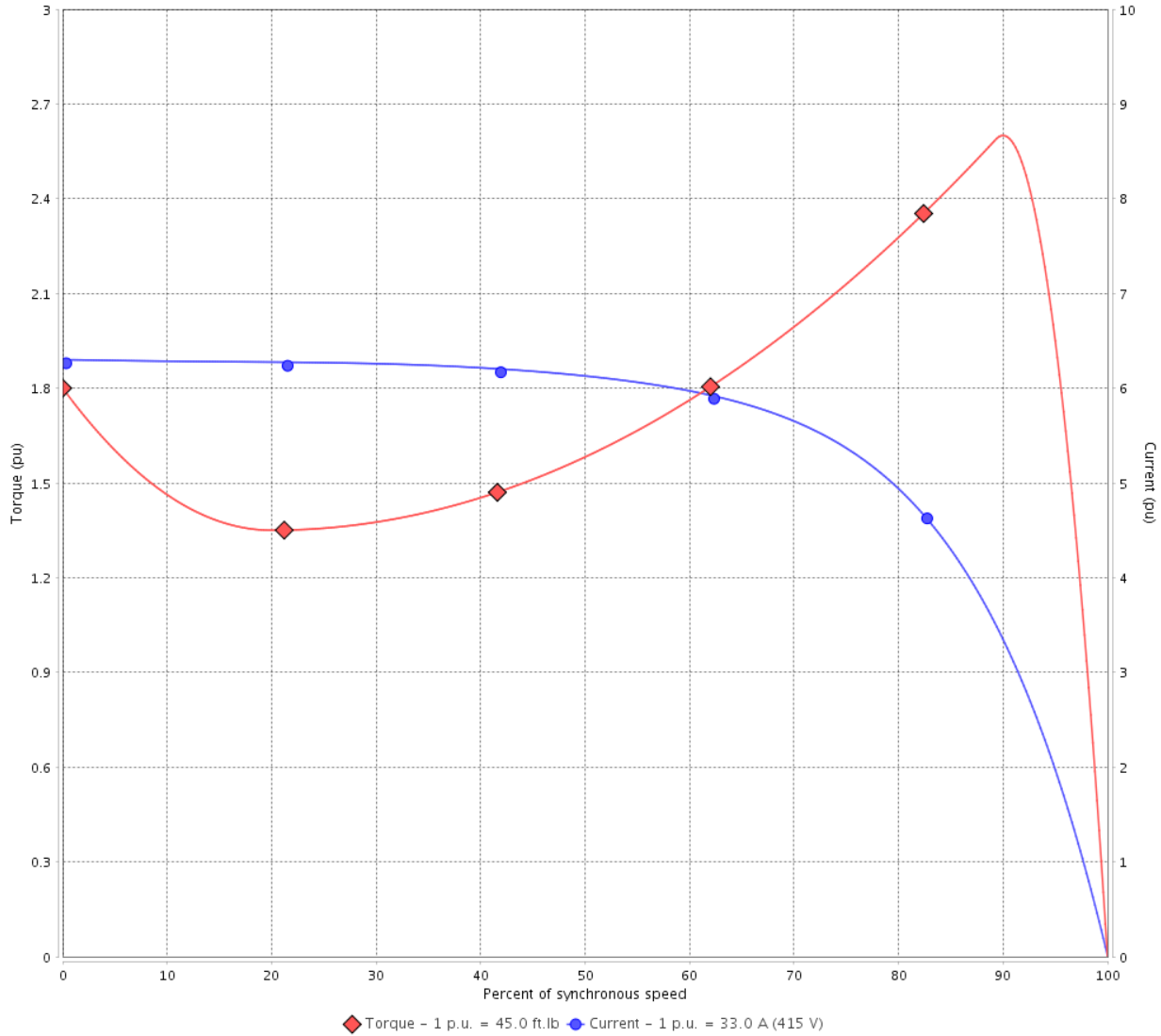
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12787962

Catalog # : 02536OT3E256JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P

Rated current	: 33.0 A	Moment of inertia (J)	: 0.9155 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 45.0 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2920 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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# LOAD PERFORMANCE CURVE

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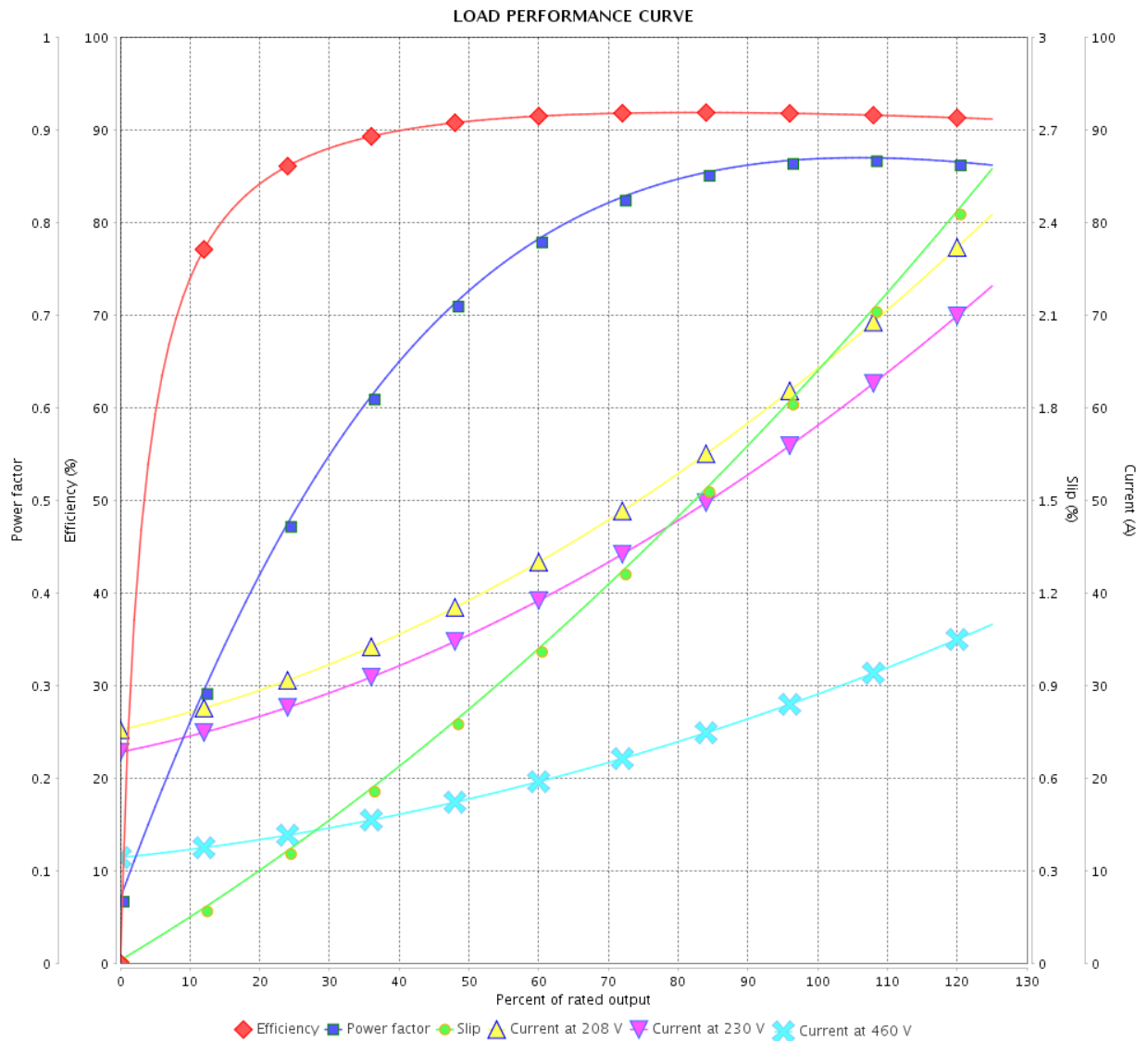


Customer : \_\_\_\_\_

Product line : JM Pump NEMA Premium  
Efficiency Three-Phase

Product code : 12787962

Catalog # : 02536OT3E256JM-S



Performance : 230/460 V 60 Hz 2P

Rated current : 58.2/29.1 A  
 LRC : 6.3  
 Rated torque : 37.2 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 290 %  
 Rated speed : 3530 rpm

Moment of inertia (J) : 0.9155 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

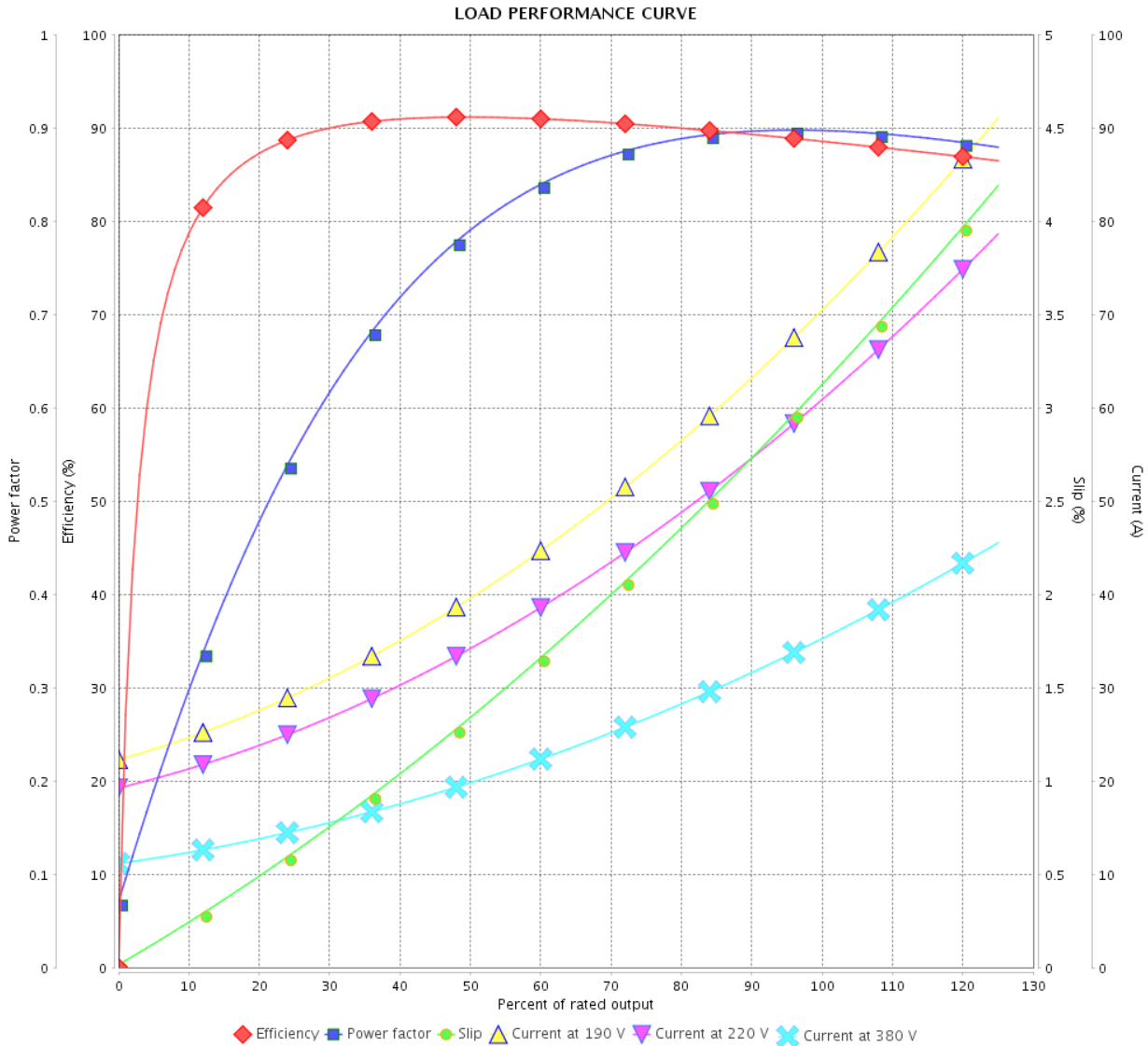


Customer :

Product line : JM Pump NEMA Premium  
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Product code : 12787962

Catalog # : 02536OT3E256JM-S



Performance : 190-220/380 V 50 Hz 2P

Rated current : 70.6-61.0/35.3 A  
 LRC : 5.3  
 Rated torque : 45.2 ft.lb  
 Locked rotor torque : 150 %  
 Breakdown torque : 220 %  
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.9155 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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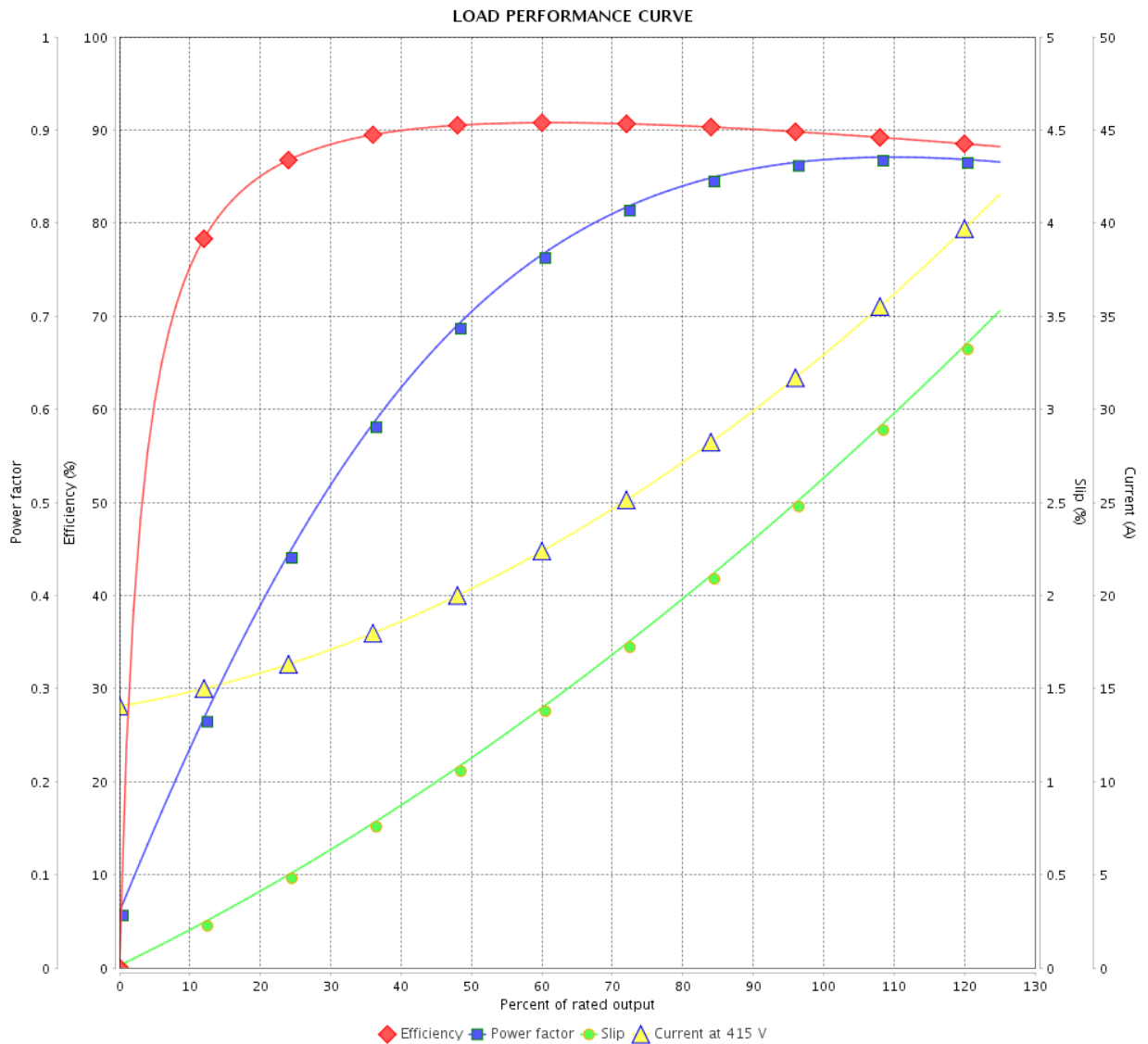


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Performance : 415 V 50 Hz 2P

Rated current : 33.0 A  
 LRC : 6.3  
 Rated torque : 45.0 ft.lb  
 Locked rotor torque : 180 %  
 Breakdown torque : 260 %  
 Rated speed : 2920 rpm

Moment of inertia (J) : 0.9155 sq.ft.lb  
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 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



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Performance : 230/460 V 60 Hz 2P

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Rated torque : 37.2 ft.lb  
Locked rotor torque : 180 %  
Breakdown torque : 290 %  
Rated speed : 3530 rpm

Moment of inertia (J) : 0.9155 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

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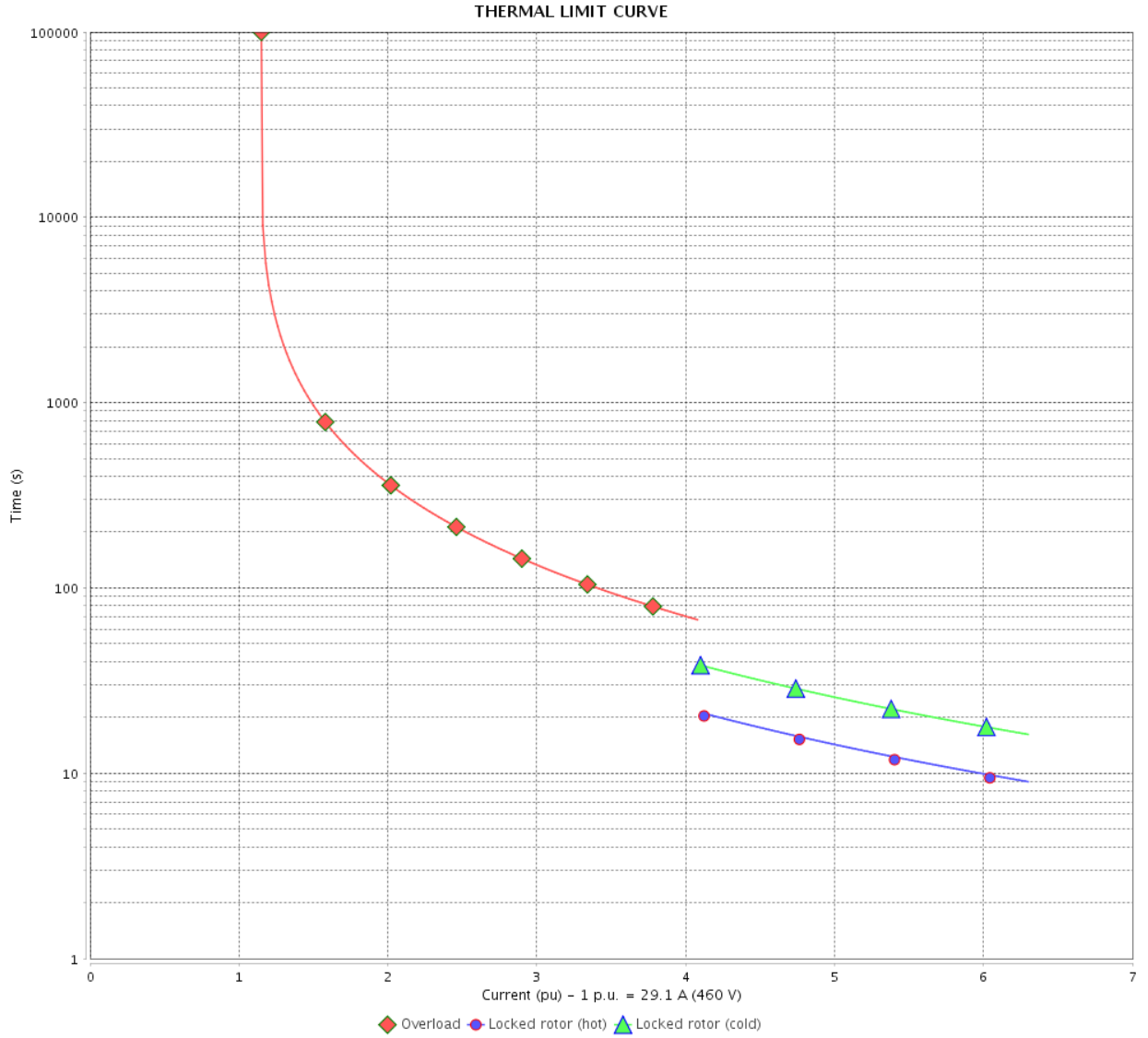


# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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Performance : 190-220/380 V 50 Hz 2P

Rated current : 70.6-61.0/35.3 A  
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Rated torque : 45.2 ft.lb  
Locked rotor torque : 150 %  
Breakdown torque : 220 %  
Rated speed : 2905 rpm

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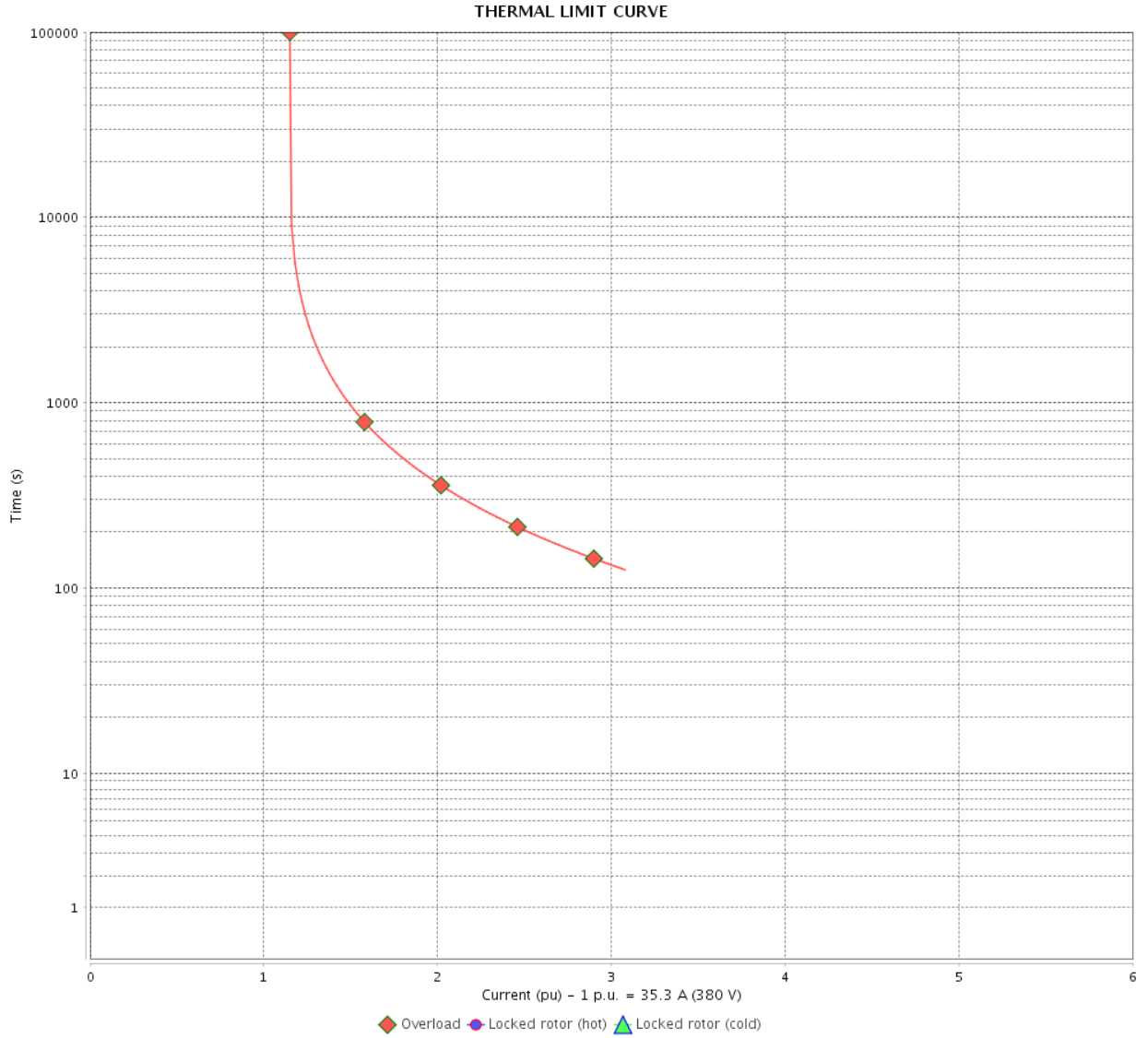
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Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

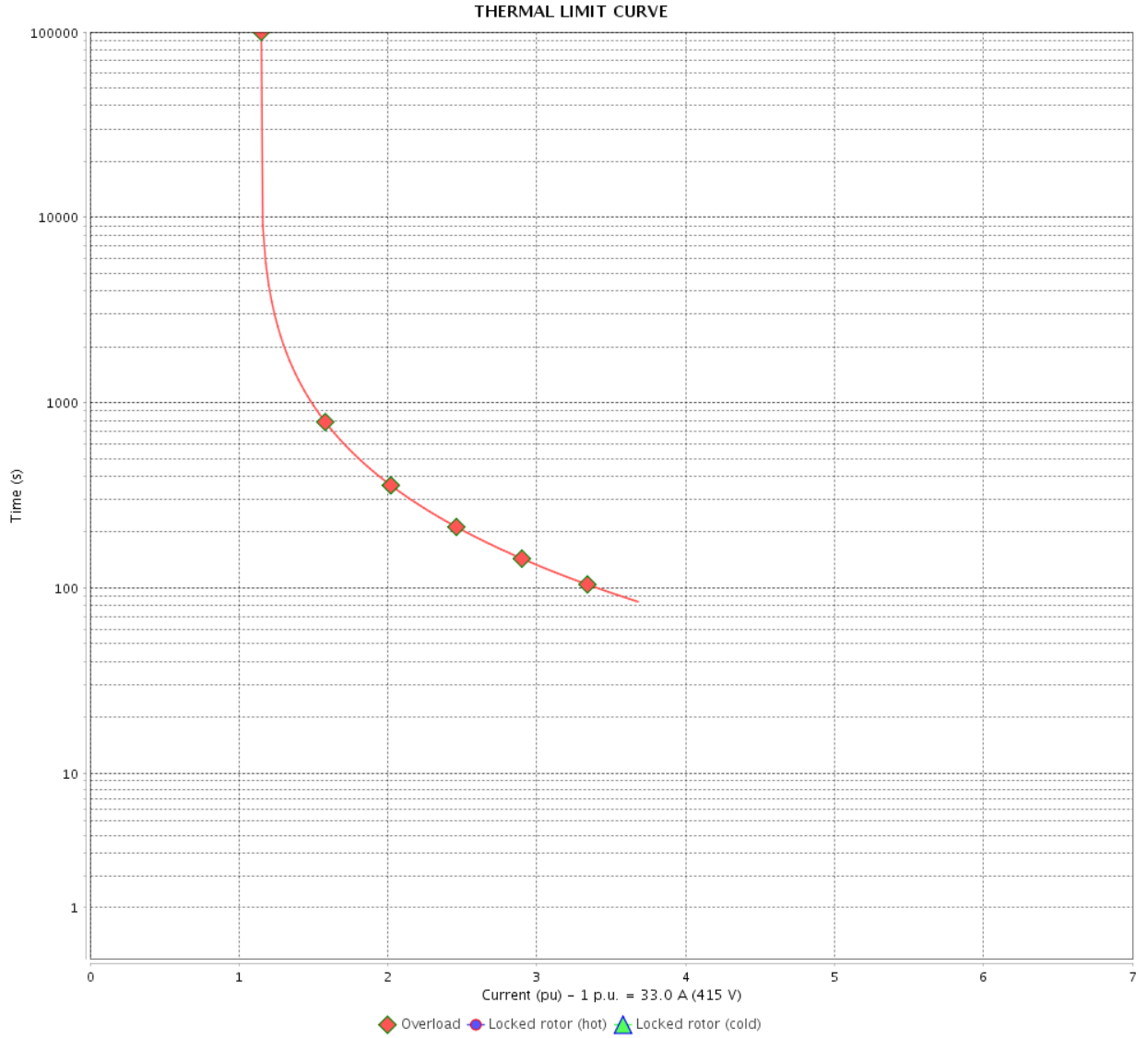
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



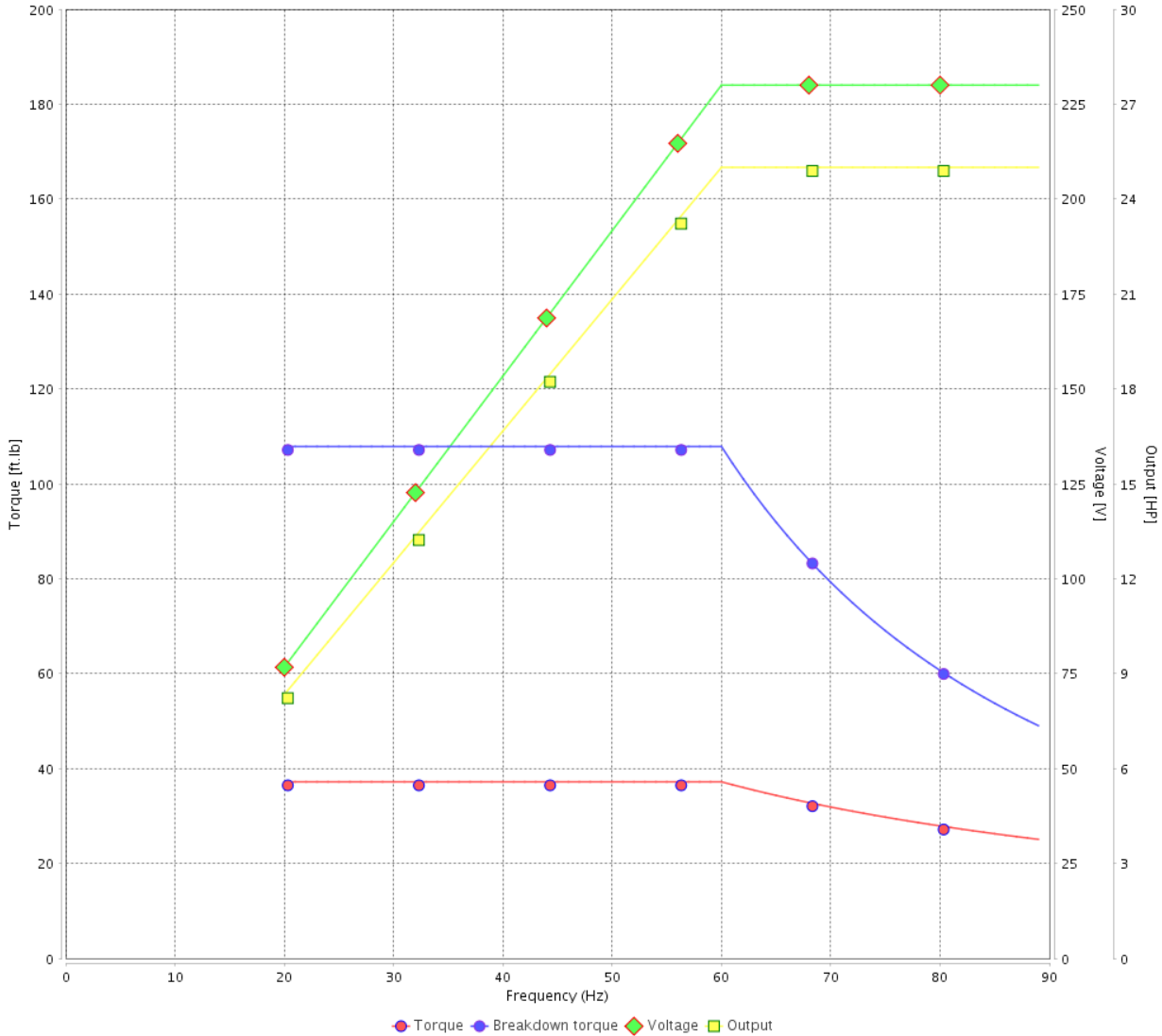
Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12787962

Catalog # : 02536OT3E256JM-S

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 2P

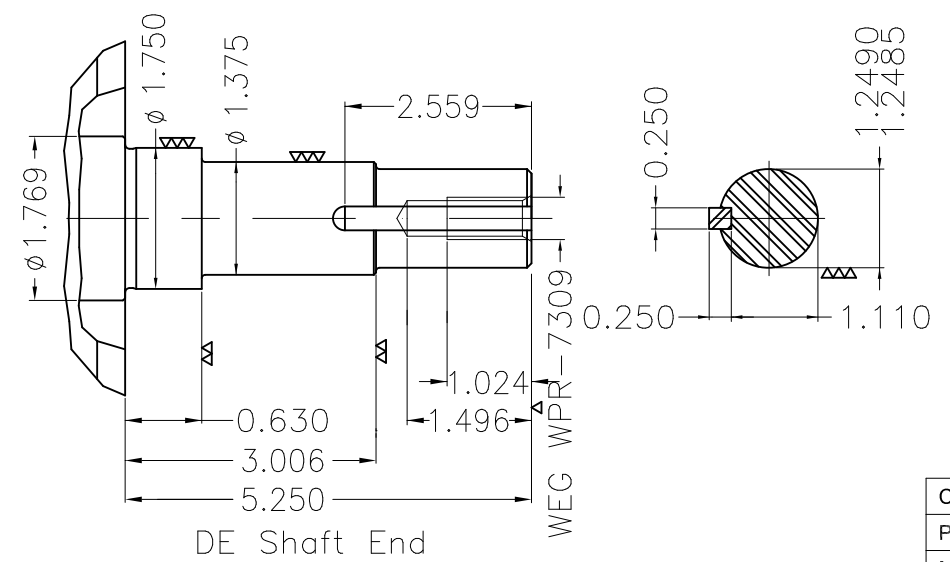
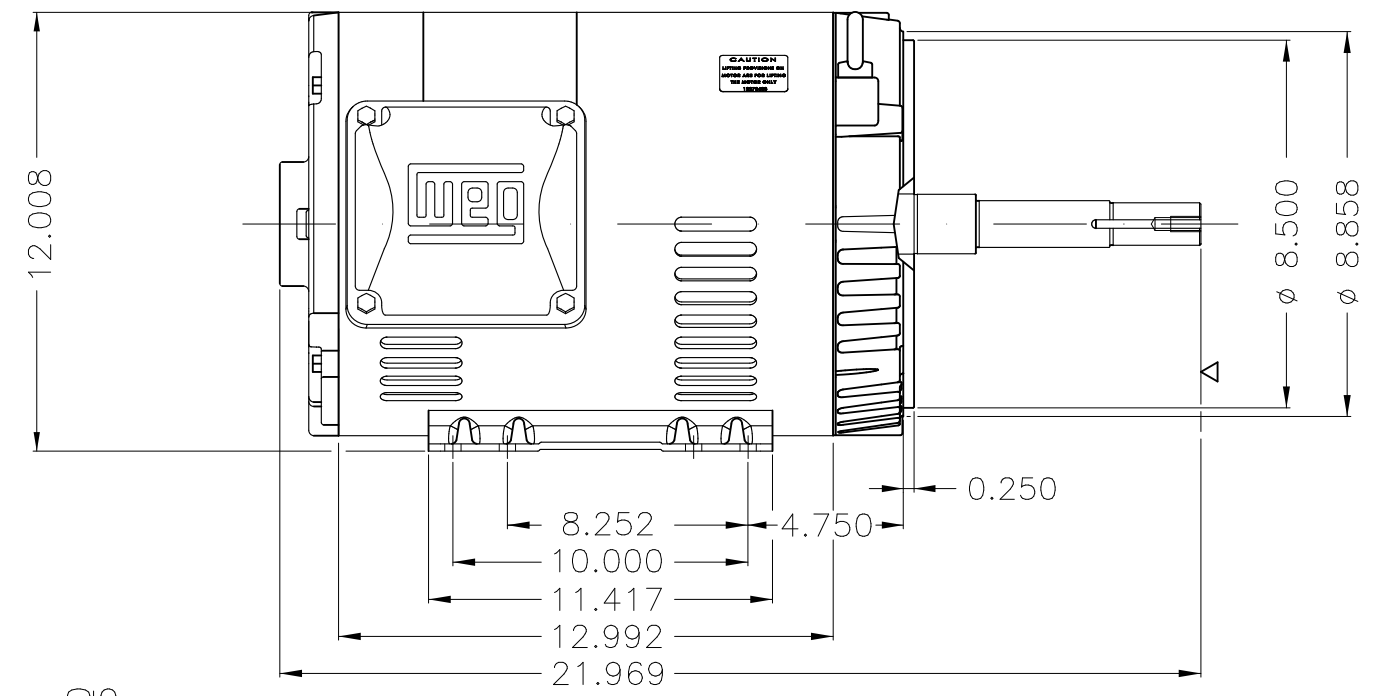
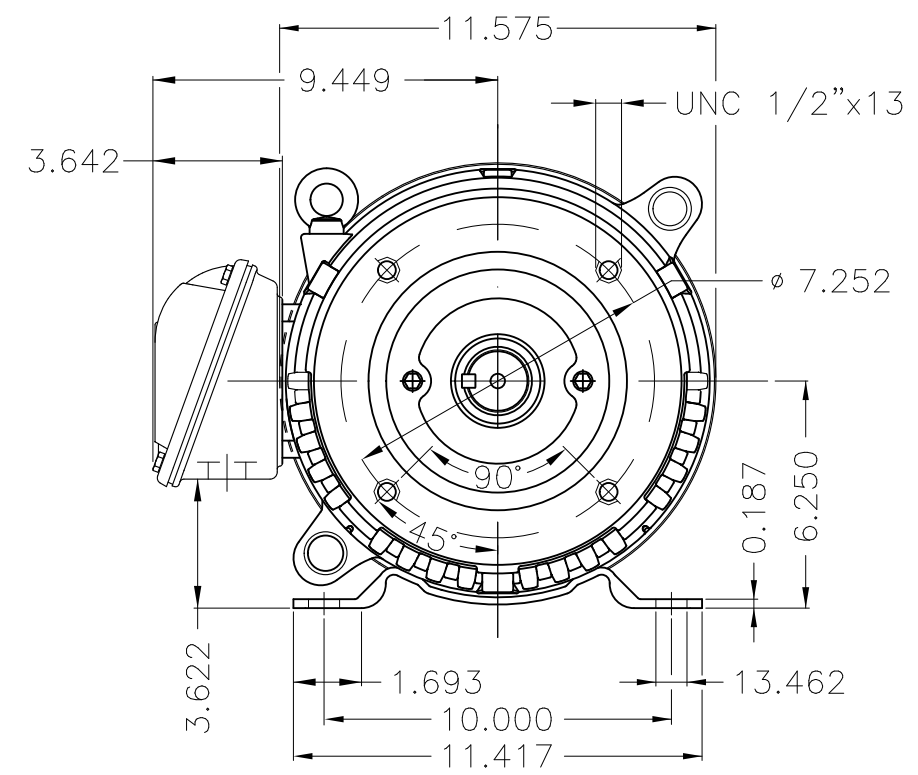
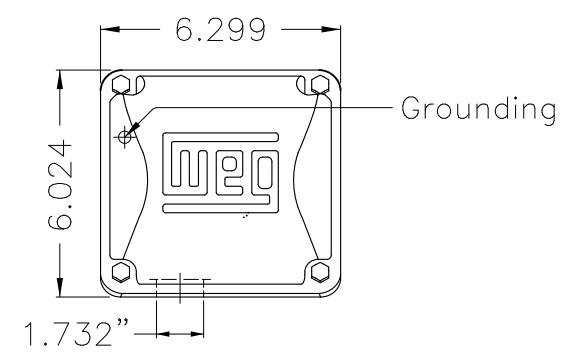
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 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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1 2 3 4 5 6

A  
B  
C  
D  
E



EUNC 1/2"-13 WEG WPR-7309

DE Shaft End

Color Munsell N 1 matte black									
Painting plan 207N									
Mounting F-1/B34R(D)									
ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRBUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 1/2"							
CHECKED		FRAME 254/6JM IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

PREVIEW  
WDD



25 HP 02 Poles 60 Hz

**NEMA  
Premium**

3PT9

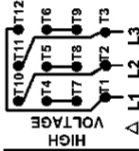
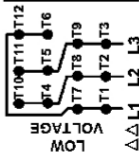


Energy Verified

MADE IN MEXICO

**MAT: 12787962 CC029A****W01.T00IC0X0N****MODEL 02536OT3E256JM-S****10JAN2022 S/N:**

<b>PH 3</b>	<b>Hz 60</b>	<b>HP 25</b>
<b>FR 254/6JM</b>		<b>KW 18.5</b>
<b>DUTY CONT.</b>		<b>V 230/460</b>
<b>ALT 1000 m.a.s.l.</b>		<b>A 58.2/29.1</b>
<b>INS CL F AT 80K</b>		<b>SFA 66.9/33.5</b>
<b>AMB 40°C</b>	<b>DES B</b>	<b>SF 1.15</b>
<b>ENCL ODP</b>	<b>CODE G</b>	<b>PF 0.87</b>
<b>USABLE @ 208V 64.4A</b>		<b>RPM 3530</b>
<b>SF1.00</b>		<b>NEMA NOM. EFF 91.7%</b>

**ALTERNATE RATING: 25HP 50Hz 190-220/380-415V SF1.15****70.6-62.3/35.3-33.0A 2905RPM EFF 88.5% IEC 60034-1****Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 3:1 CT****DE 6309-Z-C3 ODE 6208-Z-C3 MOBIL POLYREX EM 20000h**

**T1-BLU T2-WHT**  
**T3-ORG T4-YEL**  
**T5-BLK T6-GRY**  
**T7-PNK T8-RED**  
**T9-BRK RED**  
**T10-CURRY**  
**T11-GRN T12-VLT**

**INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION**

**WARNING:** Motor must be grounded in accordance with local and national electrical codes to prevent serious electrical shocks. Disconnect power source before servicing unit.

**AVERTISSEMENT:** Le moteur doit être mis à la terre

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

