

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase	Product code :	14484975		
		Catalog # :	06036OT3G326JM-W40		
Frame	: 324/6JM	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>	: 485 lb		
Protection degree	: IP23	Moment of inertia (J)	: 3.82 sq.ft.lb		
Design	: B				
Output [HP]	60	50	50	50	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	71.0	69.8	68.7	69.5	
L. R. Amperes [A]	447	482	460	473	
LRC [A]	6.3x(Code G)	6.9x(Code H)	6.7x(Code H)	6.8x(Code H)	
No load current [A]	25.0	23.0	27.0	30.0	
Rated speed [RPM]	3560	2960	2960	2965	
Slip [%]	1.11	1.33	1.33	1.17	
Rated torque [ft.lb]	88.5	88.7	88.7	88.6	
Locked rotor torque [%]	220	220	240	260	
Breakdown torque [%]	229	229	250	270	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	27s (cold) 15s (hot)	28s (cold) 16s (hot)	25s (cold) 14s (hot)	23s (cold) 13s (hot)	
Noise level <sup>2</sup>	75.0 dB(A)				
Efficiency (%)	25%	91.7	88.9	89.0	89.2
	50%	92.4	90.5	90.6	90.7
	75%	93.0	92.0	92.1	92.2
	100%	93.6	93.7	93.7	93.7
Power Factor	25%	0.48	0.50	0.43	0.38
	50%	0.73	0.73	0.67	0.60
	75%	0.82	0.82	0.77	0.72
	100%	0.85	0.86	0.83	0.79
Bearing type	: <u>Drive end</u> 6312 Z C3	<u>Non drive end</u> 6211 Z C3	Foundation loads		
Sealing	: Without	Without	Max. traction		
	Bearing Seal	Bearing Seal	Max. compression		
Lubrication interval	: 19658 h	20000 h			
Lubricant amount	: 21 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.		
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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



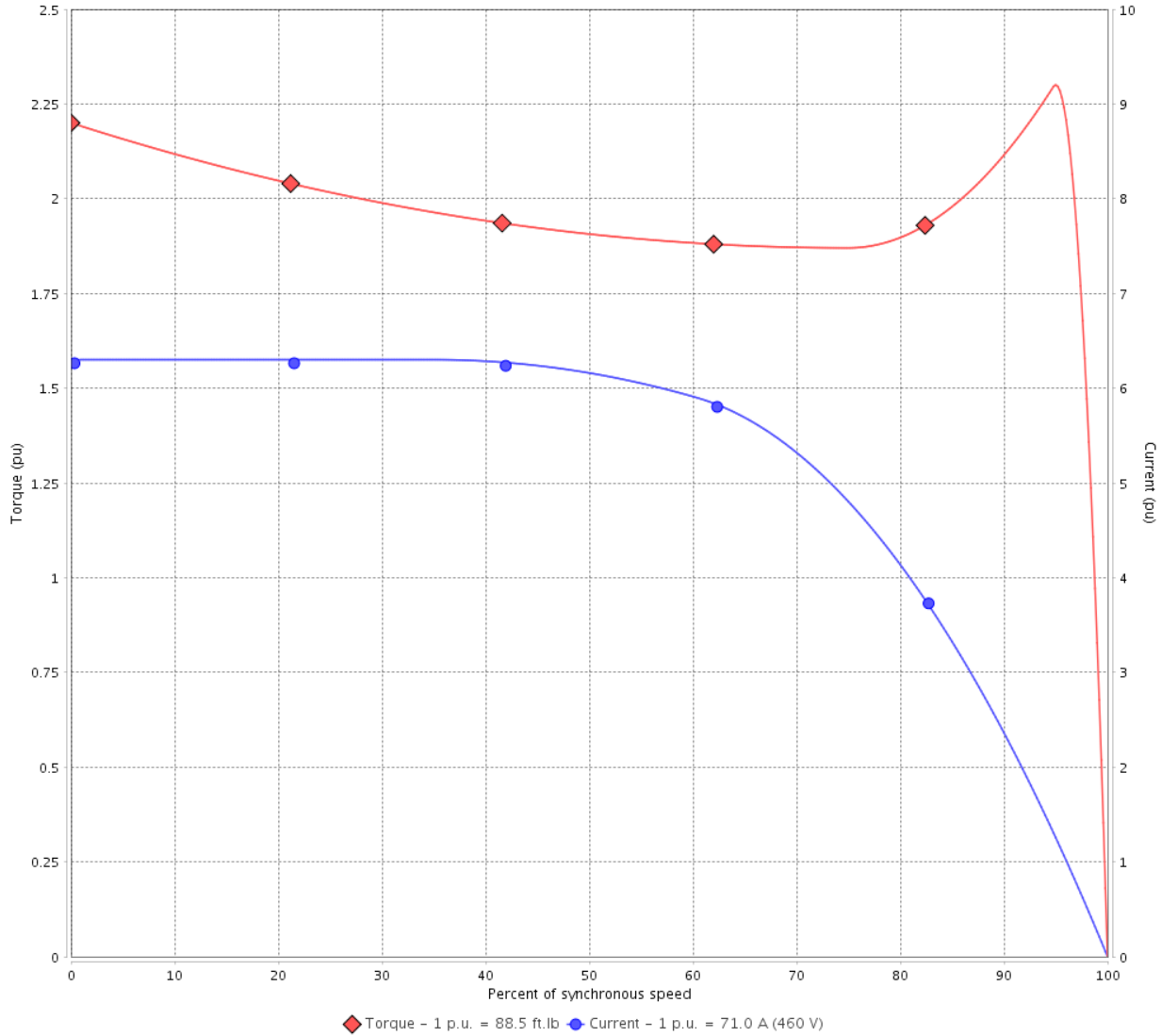
Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 460 V 60 Hz 2P

Rated current	: 71.0 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 88.5 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

Locked rotor time : 27s (cold) 15s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



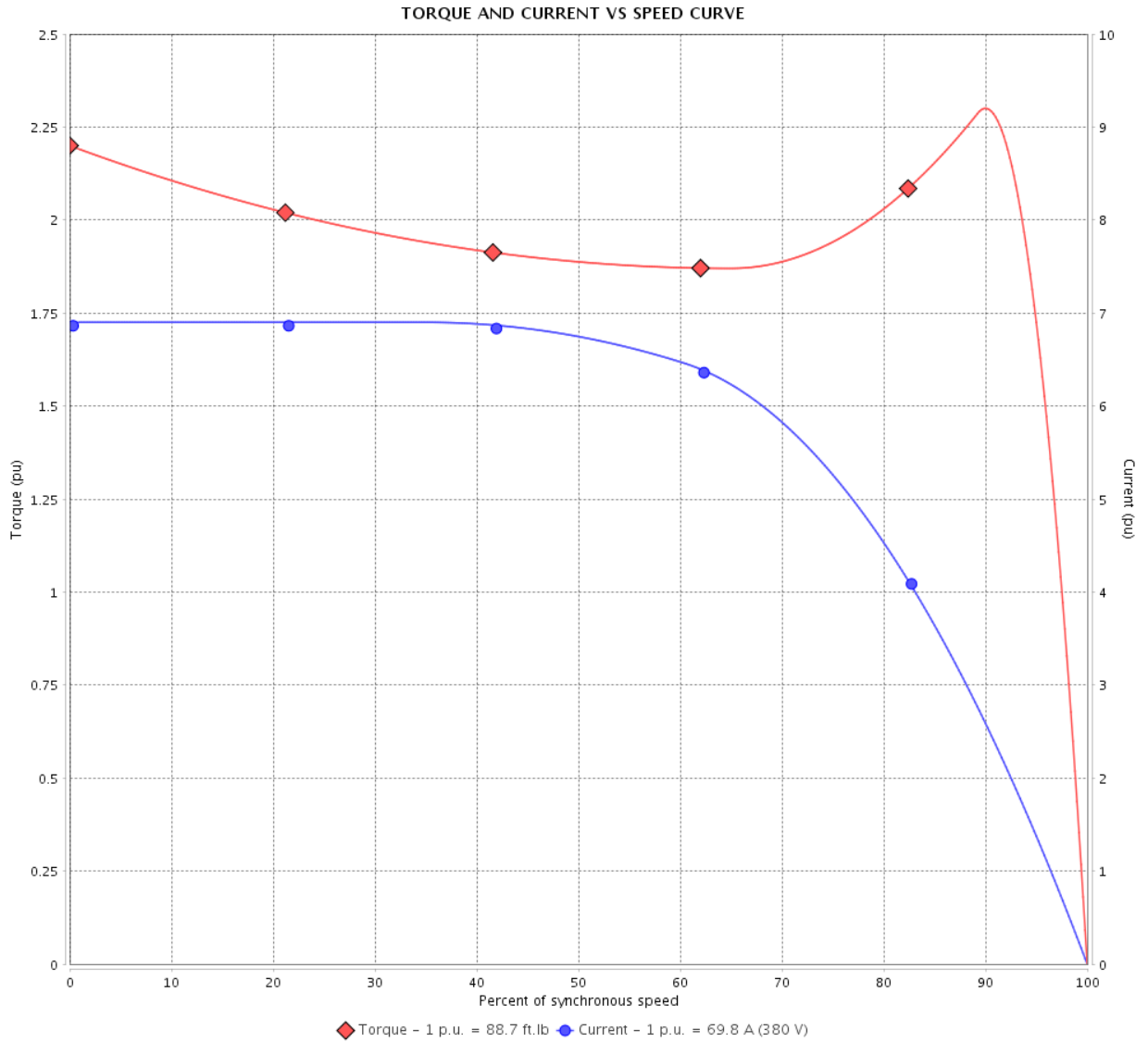
## Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40



Performance : 380 V 50 Hz 2P IE3

Rated current	: 69.8 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 88.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Locked rotor time : 28s (cold) 16s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



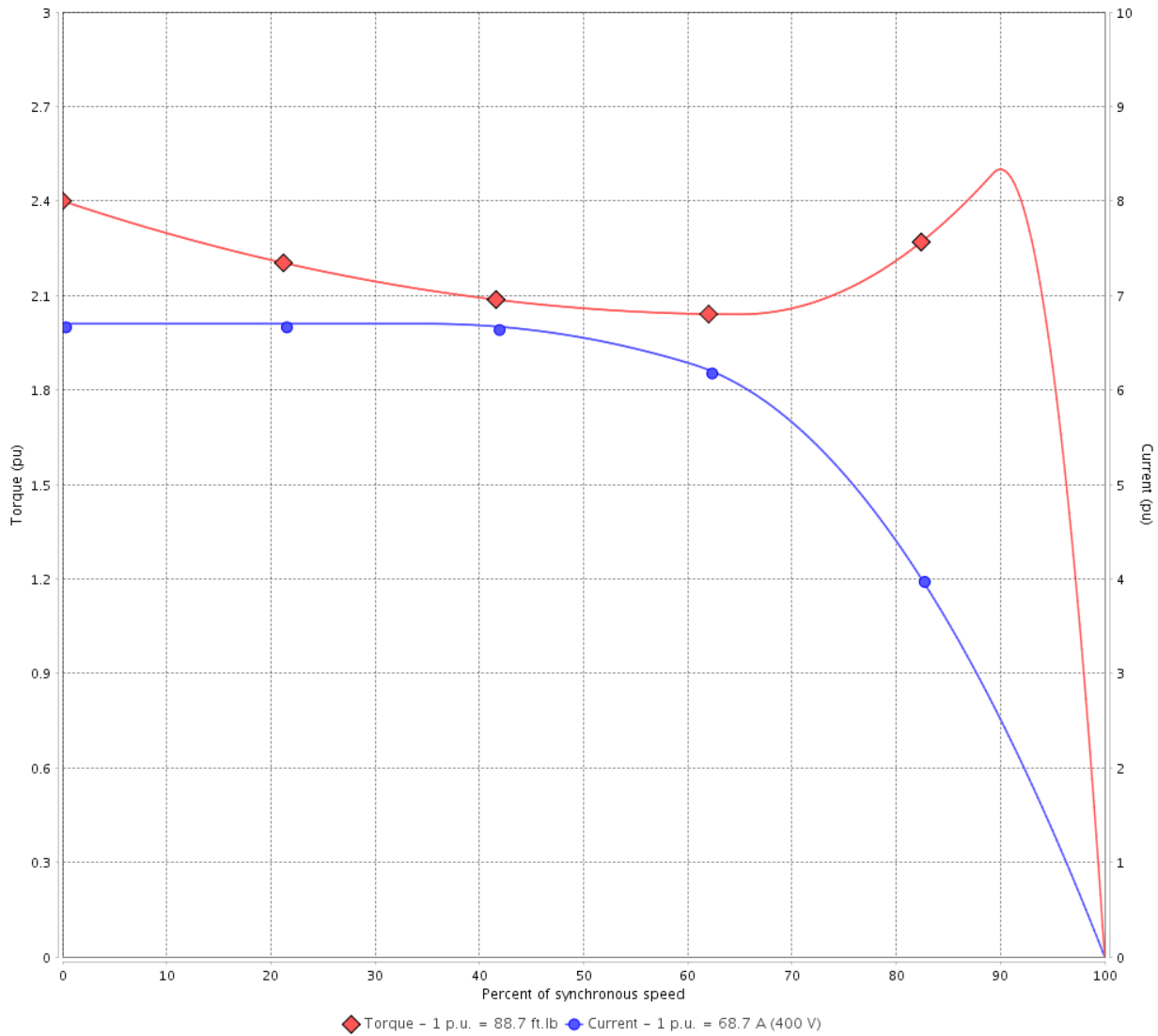
Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current	: 68.7 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 88.7 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

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# TORQUE AND CURRENT VS SPEED CURVE



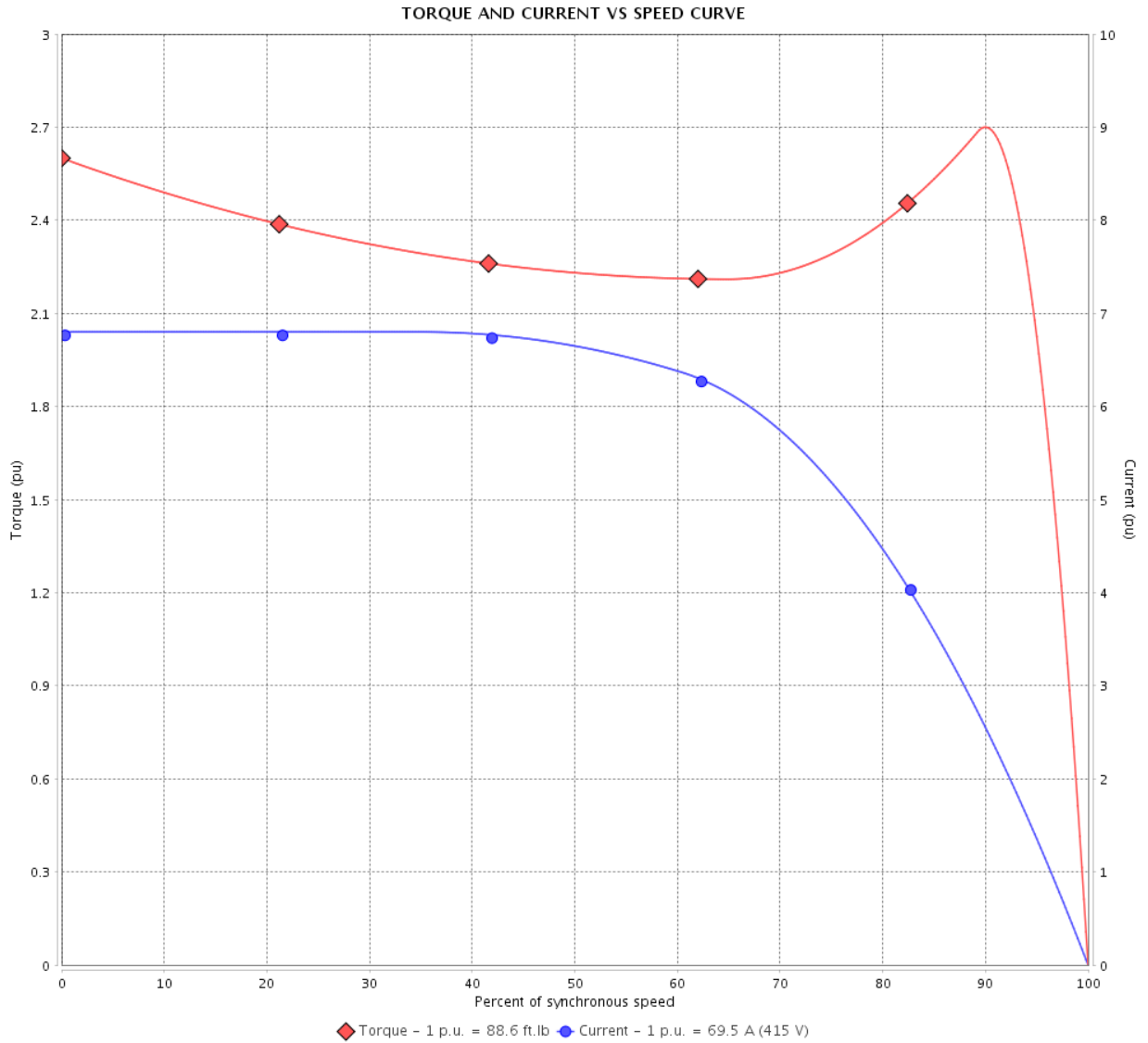
## Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40



Performance : 415 V 50 Hz 2P IE3

Rated current	: 69.5 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 88.6 ft.lb	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



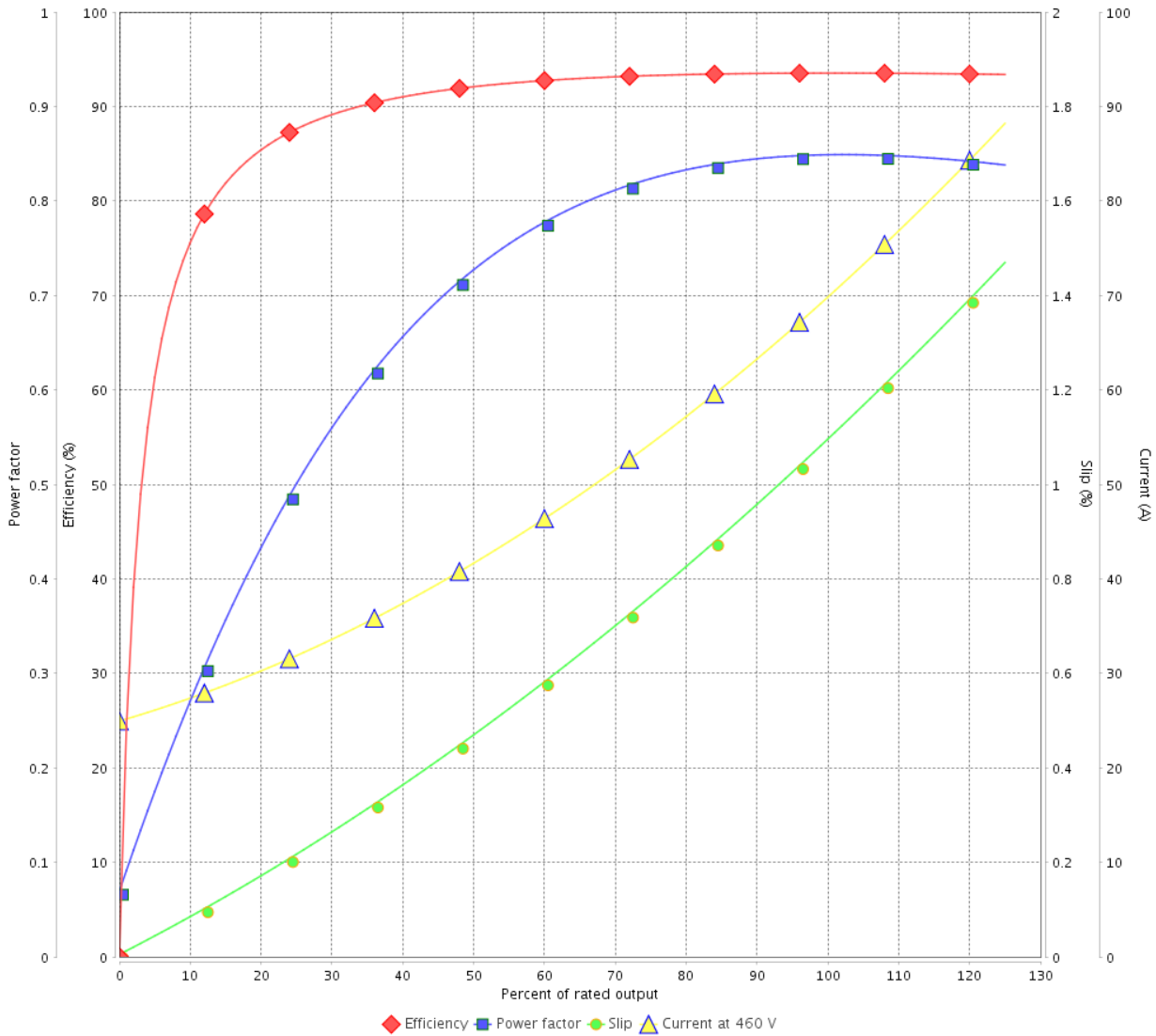
Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40

LOAD PERFORMANCE CURVE



Performance : 460 V 60 Hz 2P

Rated current : 71.0 A  
 LRC : 6.3  
 Rated torque : 88.5 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 229 %  
 Rated speed : 3560 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

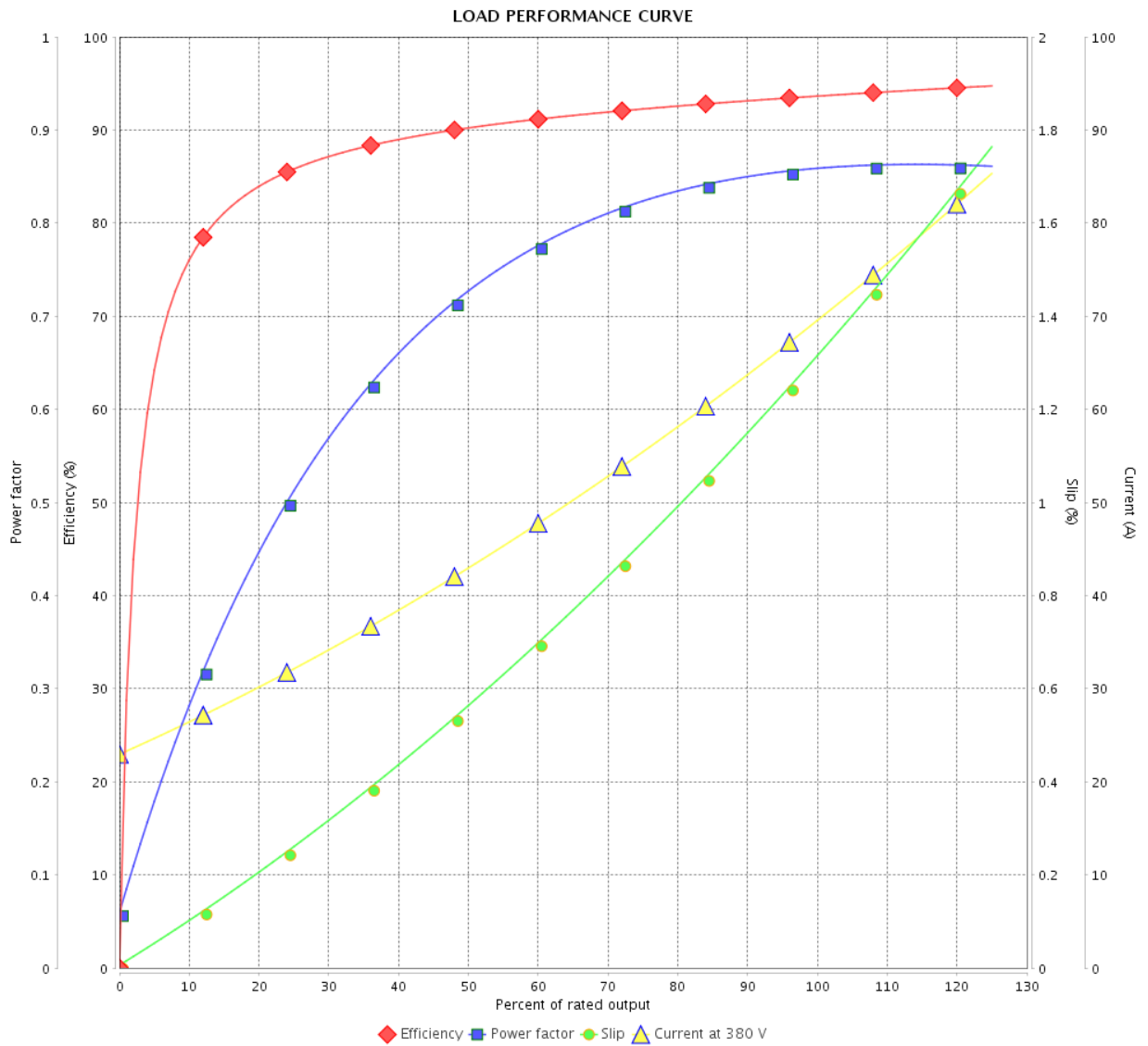


Customer : \_\_\_\_\_

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40



Performance : 380 V 50 Hz 2P IE3

Rated current : 69.8 A  
 LRC : 6.9  
 Rated torque : 88.7 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 229 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

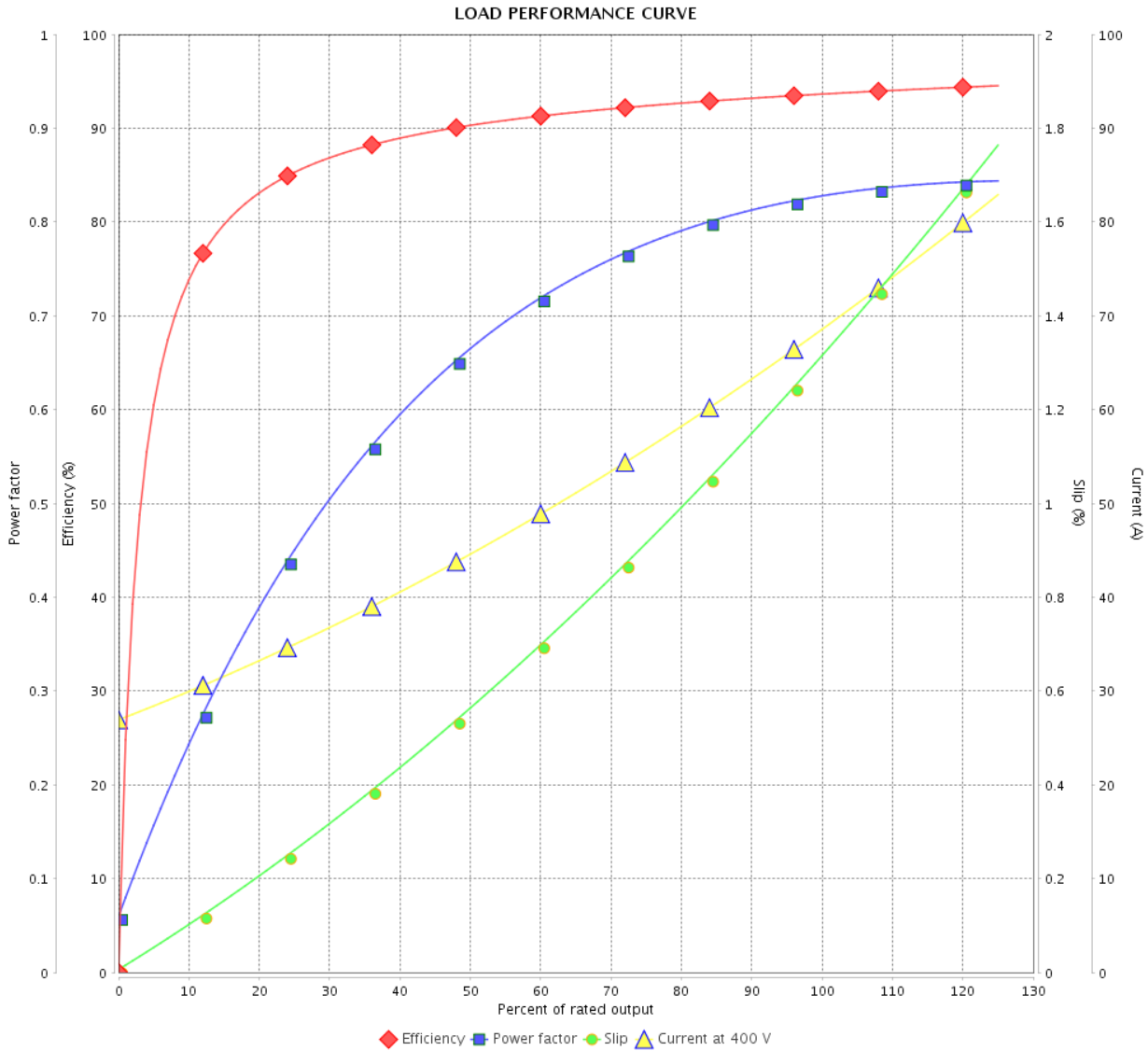


Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40



Performance : 400 V 50 Hz 2P IE3

Rated current : 68.7 A  
 LRC : 6.7  
 Rated torque : 88.7 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 250 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

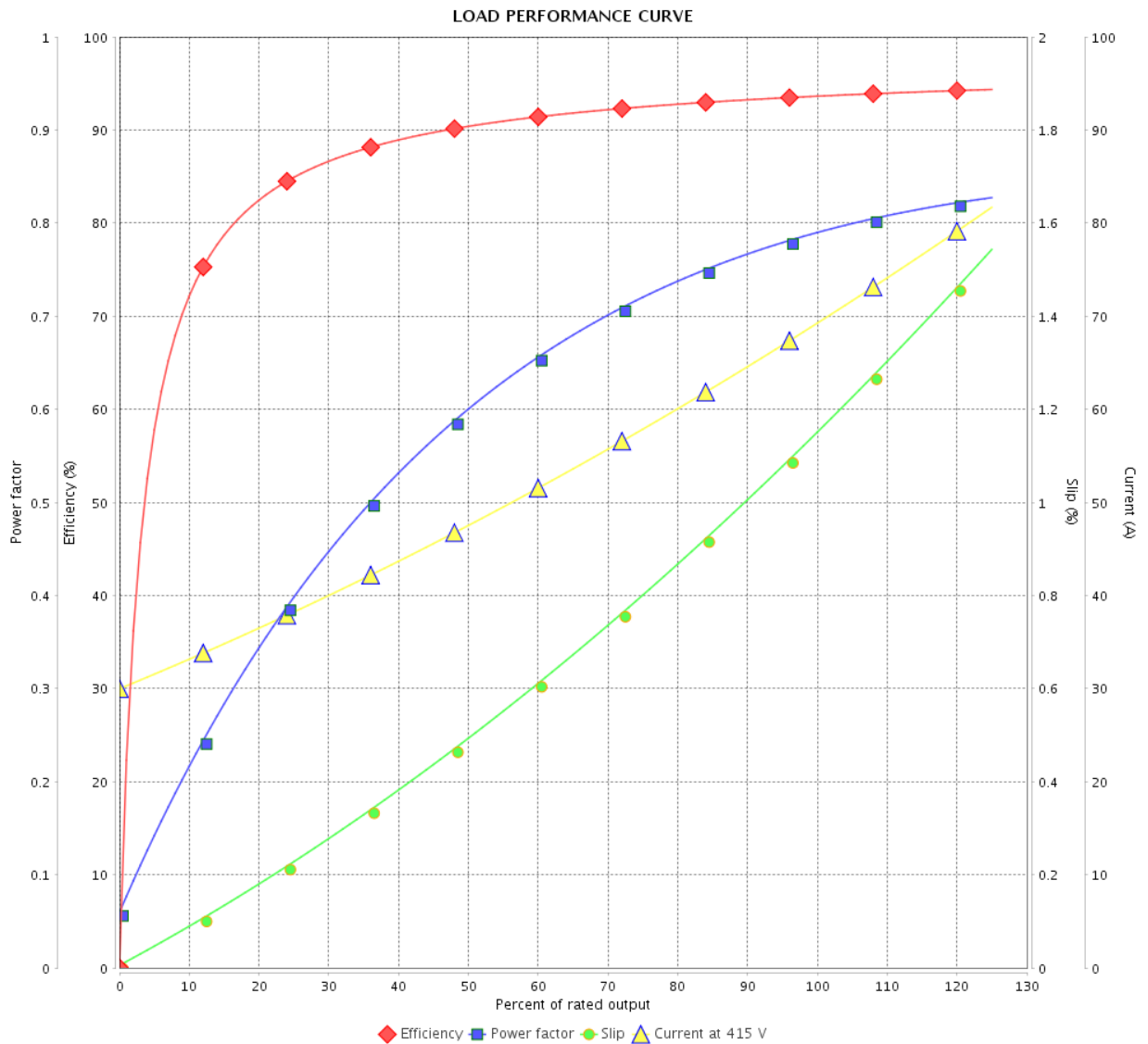


Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40



Performance : 415 V 50 Hz 2P IE3

Rated current : 69.5 A  
 LRC : 6.8  
 Rated torque : 88.6 ft.lb  
 Locked rotor torque : 260 %  
 Breakdown torque : 270 %  
 Rated speed : 2965 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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Rated current	: 71.0 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 88.5 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

Heating constant

Cooling constant

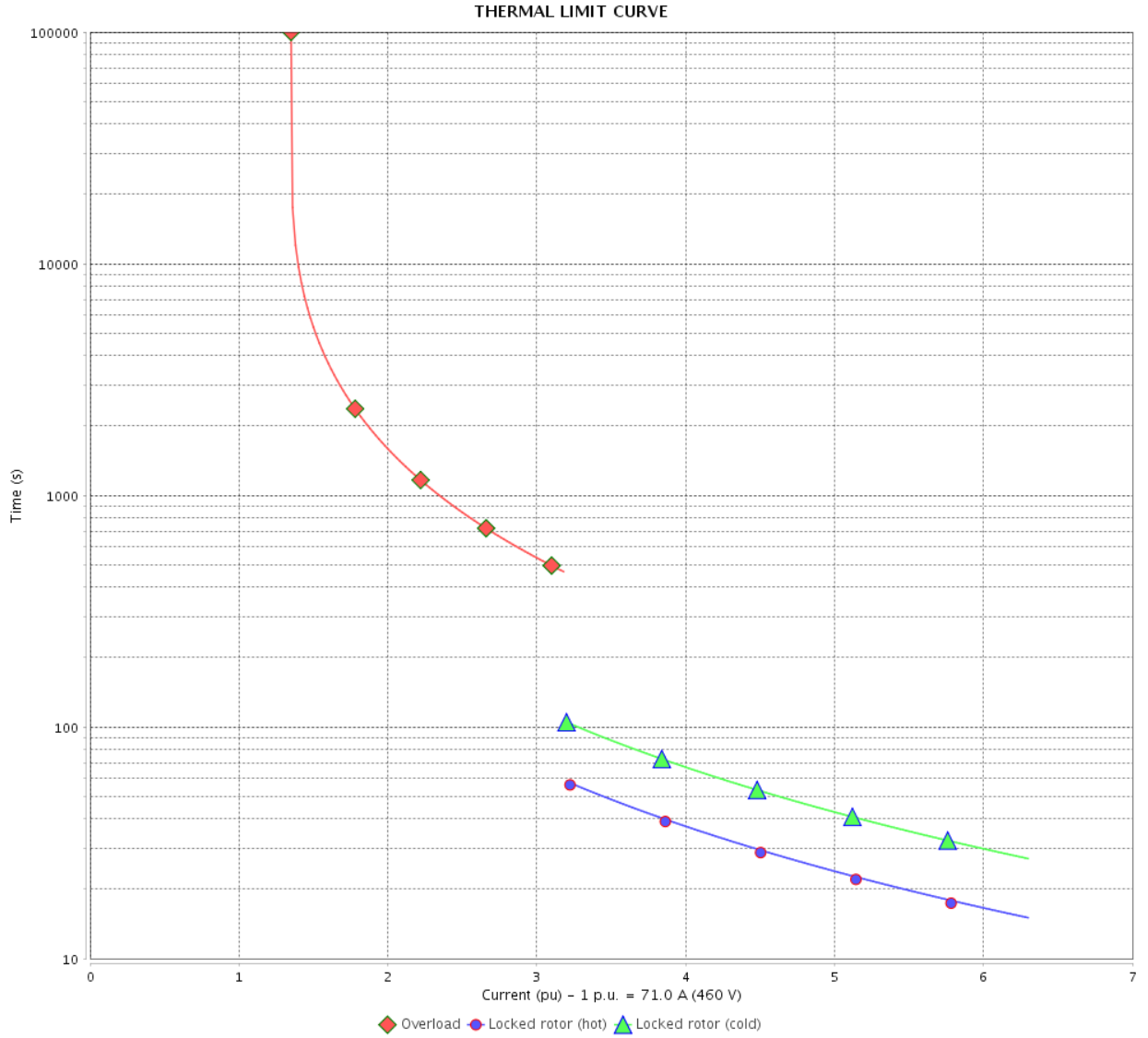
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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



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# THERMAL LIMIT CURVE



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Customer :

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Product code : 14484975

Catalog # : 06036OT3G326JM-W40

Performance : 380 V 50 Hz 2P IE3

Rated current	: 69.8 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 88.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Heating constant

Cooling constant

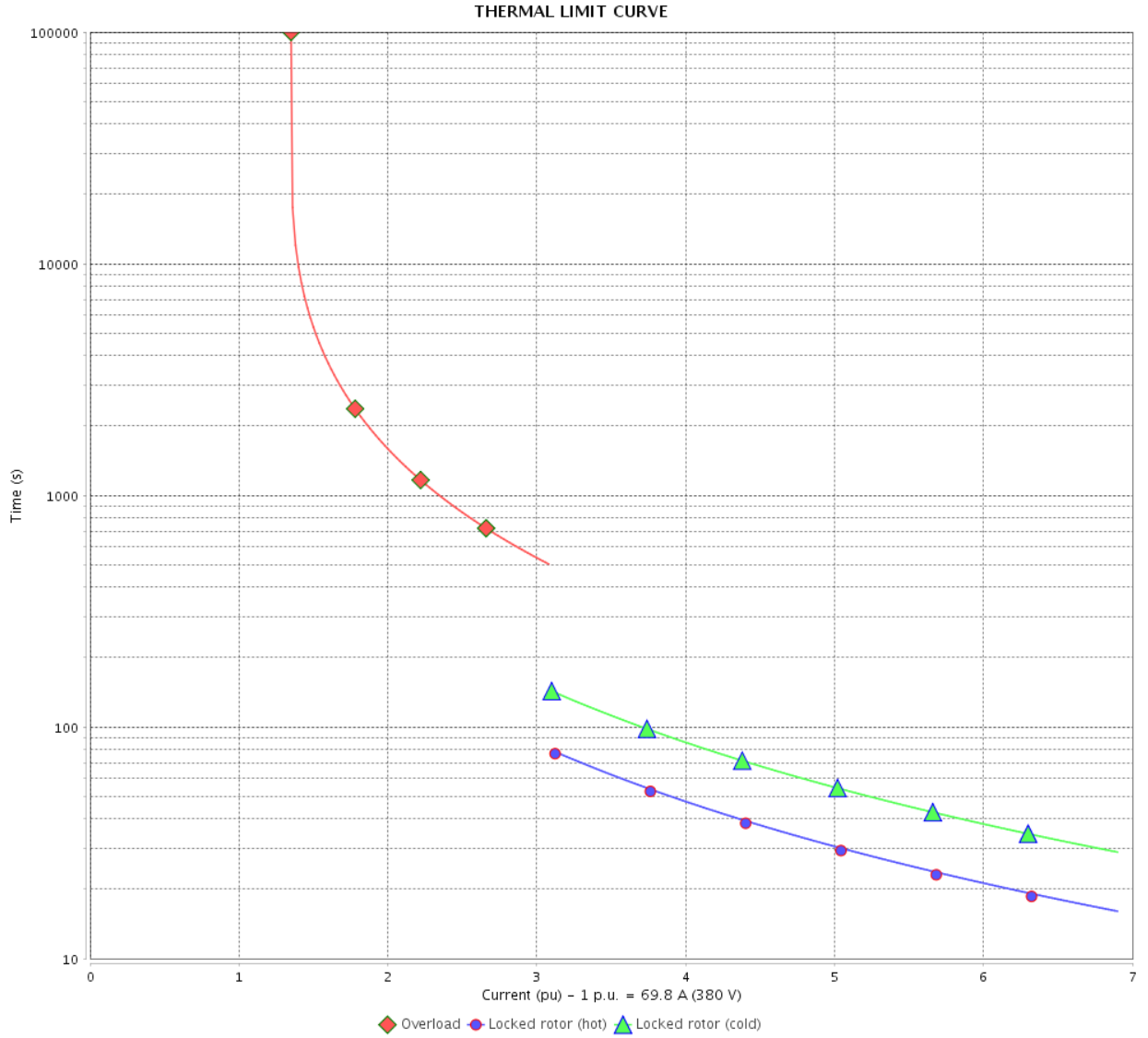
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Three Phase Induction Motor - Squirrel Cage



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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40

Performance : 400 V 50 Hz 2P IE3

Rated current	: 68.7 A	Moment of inertia (J)	: 3.82 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 88.7 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Heating constant

Cooling constant

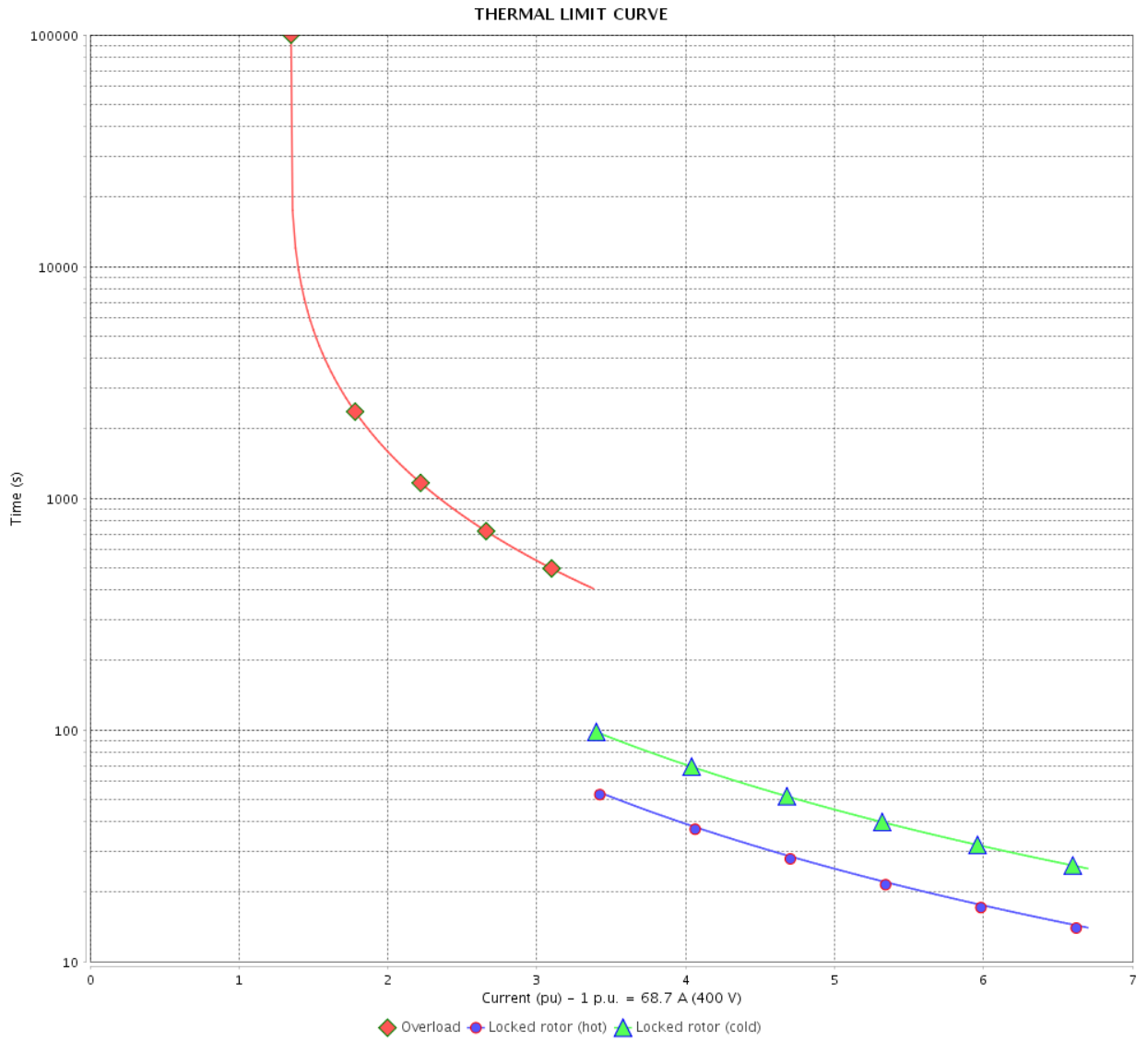
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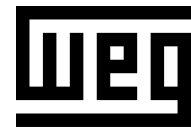


Customer : \_\_\_\_\_



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Date		13/04/2022		

# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer :

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Efficiency Three-Phase

Product code : 14484975

Catalog # : 06036OT3G326JM-W40

Performance : 415 V 50 Hz 2P IE3

Rated current : 69.5 A  
LRC : 6.8  
Rated torque : 88.6 ft.lb  
Locked rotor torque : 260 %  
Breakdown torque : 270 %  
Rated speed : 2965 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : B

Heating constant

Cooling constant

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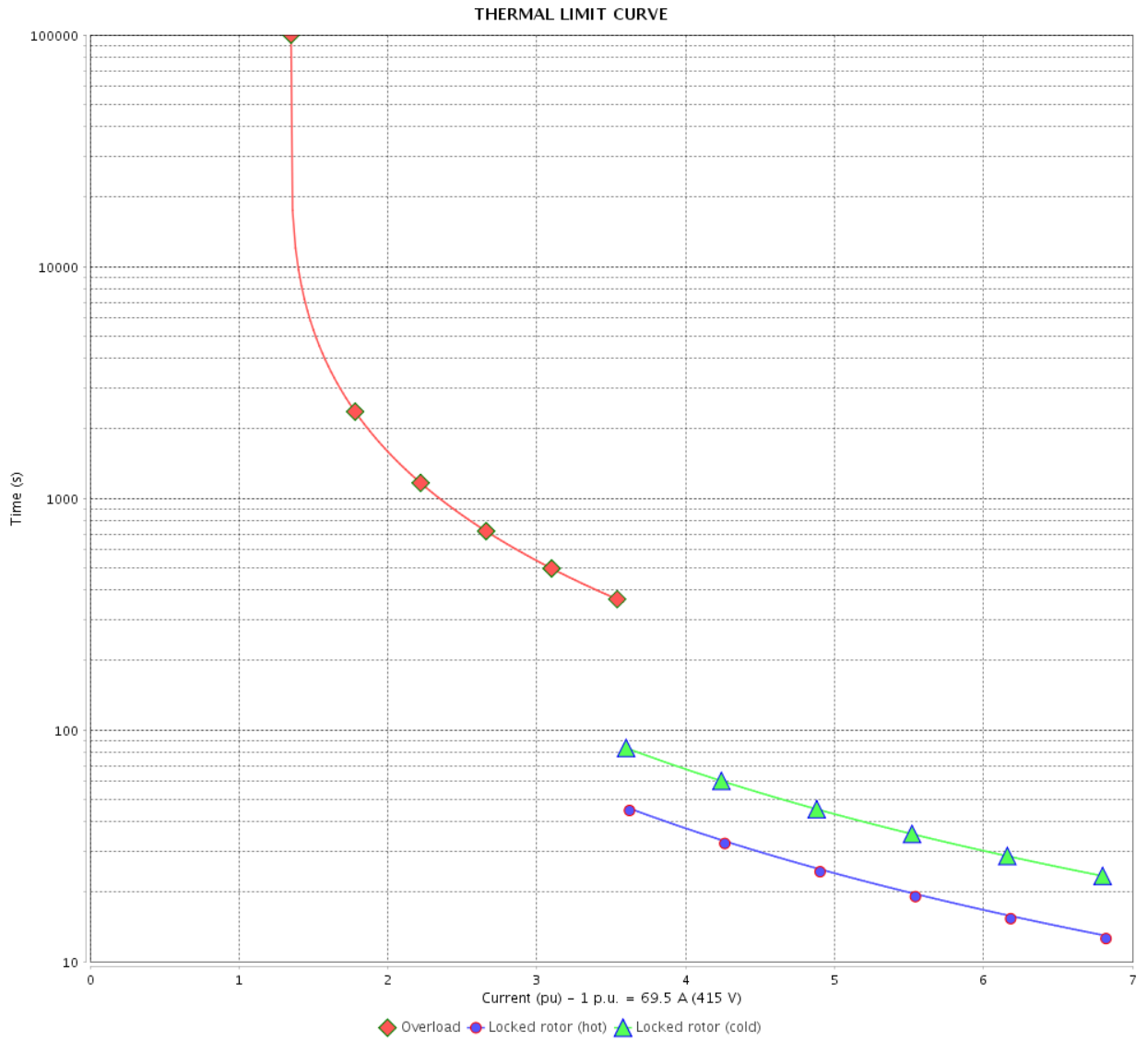


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Three Phase Induction Motor - Squirrel Cage



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



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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

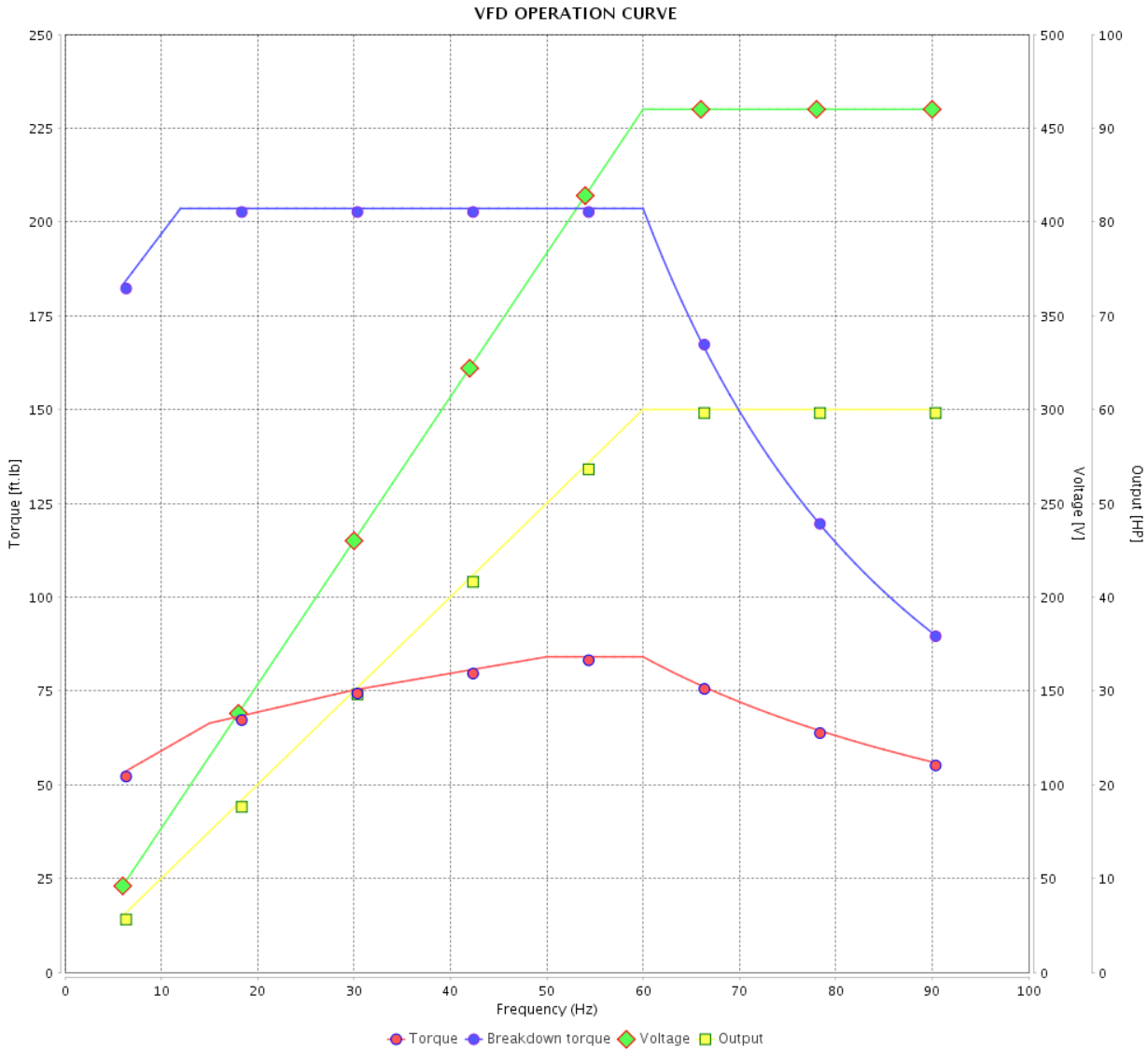


Customer :

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

Product code : 14484975

Catalog # : 06036OT3G326JM-W40



Performance : 460 V 60 Hz 2P

Rated current : 71.0 A  
 LRC : 6.3  
 Rated torque : 88.5 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 229 %  
 Rated speed : 3560 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

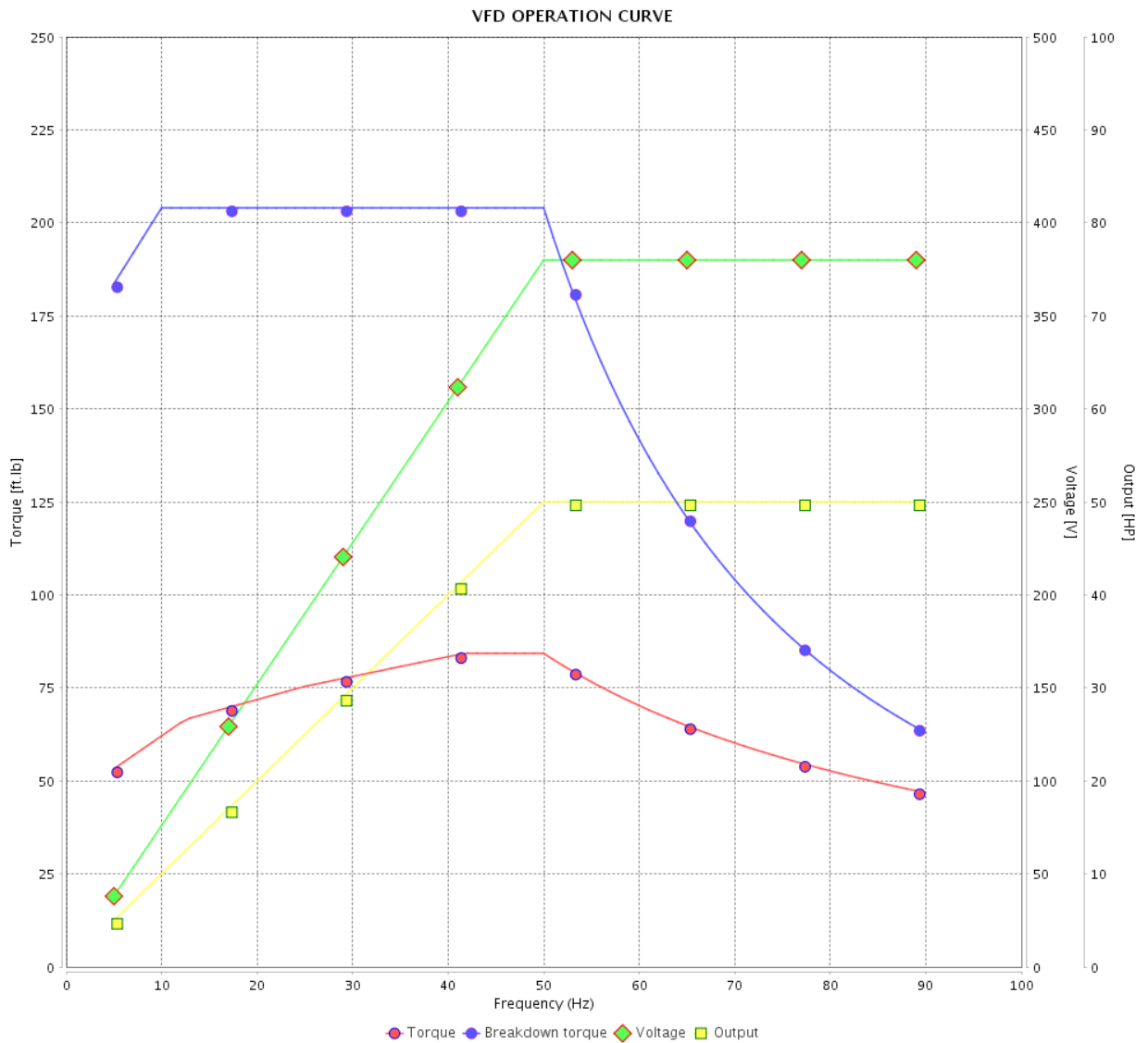


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Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14484975

Catalog # : 06036OT3G326JM-W40



Performance : 380 V 50 Hz 2P IE3

Rated current : 69.8 A  
 LRC : 6.9  
 Rated torque : 88.7 ft.lb  
 Locked rotor torque : 220 %  
 Breakdown torque : 229 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



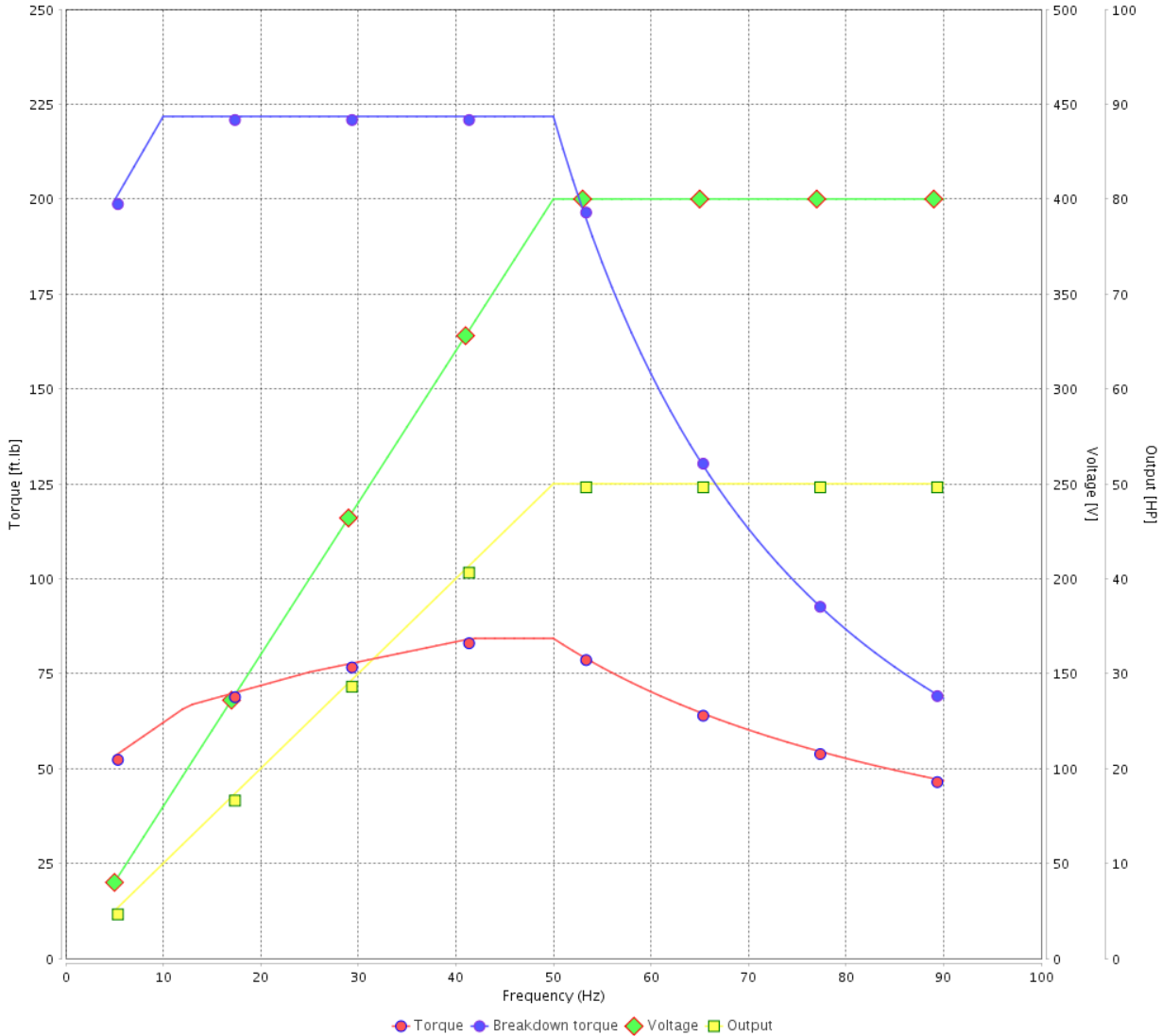
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Product code : 14484975

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VFD OPERATION CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current : 68.7 A  
 LRC : 6.7  
 Rated torque : 88.7 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 250 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 3.82 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

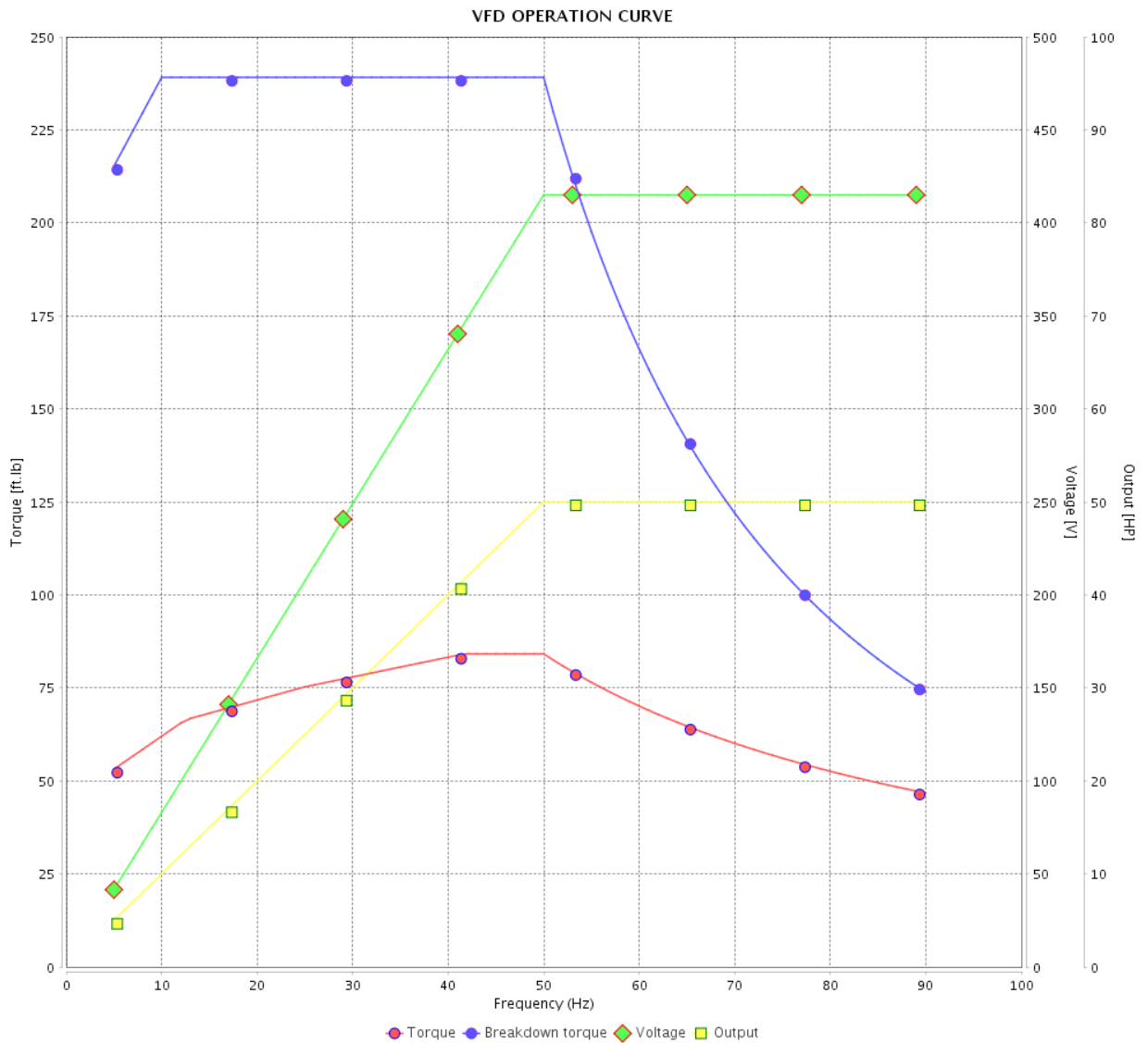


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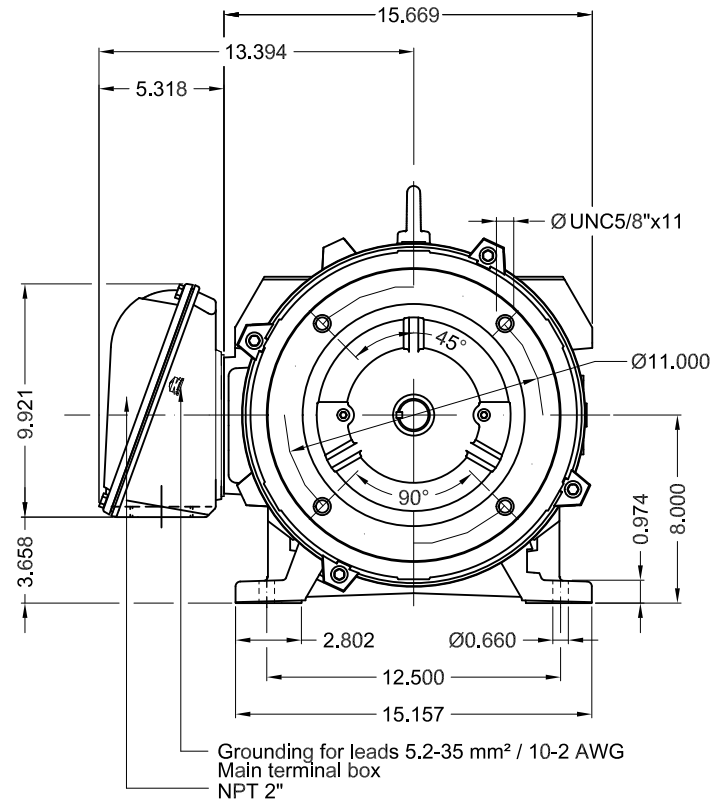


Performance : 415 V 50 Hz 2P IE3

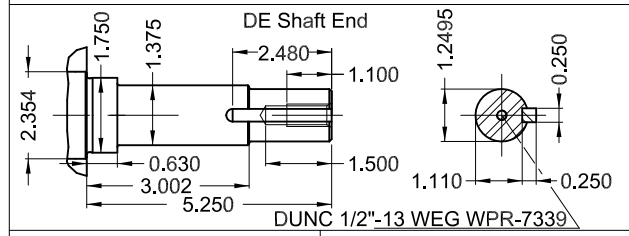
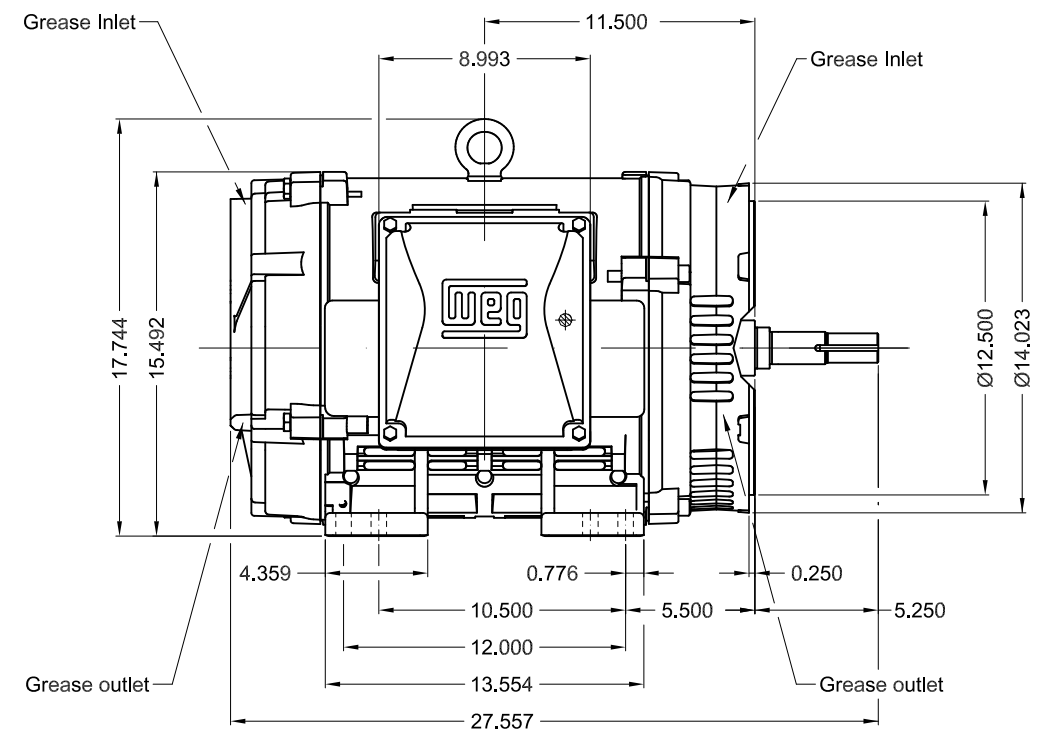
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 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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Grounding for leads 5.2-35 mm<sup>2</sup> / 10-2 AWG  
Main terminal box  
NPT 2"



60 HP 02 Poles 60 Hz A

1:8

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 324/6JM IP23 ODP					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	WDD	SHEET	1 / 1	

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

PREVIEW



MODEL 060360T3G326JM-W40  
MADE IN BRAZIL  
14484975

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

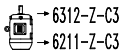
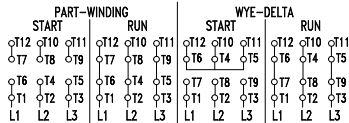


IEC 60034-1  
MOD.T01#FOXON



For 60Hz use on PWM, VT 1000:1, CT 3:1, 1.0SF

PH 3	FR 324/6JM	HP(kW) 60(45)		Hz 60
V 460		A 71.0		IP23
NEMA NOM EFF		93.6	%	RPM 3560
ENCL ODP	DUTY	CONT.		INS. CL. F $\Delta T$ 80 K
PF 0.85		DES B	CODE G	AMB. 40°C
SF 1.25		SFA 88.8		ALT 1000 m.a.s.l.
50HP 37kW 50Hz 380V 69.8A 2960RPM SF1.00 EFF 93.7% (IE3)				



MOBIL POLYREX EM  
21 g 19658 h

485 Lbs