

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line	: NEMA Premium Efficiency Three-Phase	Product code	: 14318122		
		Catalog #	: 00212ET3E184JP-W22		
Frame	: 182/4JP	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight ²	: 102 lb		
Protection degree	: IP55	Moment of inertia (J)	: 0.6210 sq.ft.lb		
Design	: B				
Output [HP]	2	2	2	2	2
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	230/460	380	400	415	415
Rated current [A]	6.44/3.22	3.66	3.61	3.58	3.58
L. R. Amperes [A]	48.3/24.2	22.0	24.2	25.4	25.4
LRC [A]	7.5x(Code L)	6.0x(Code J)	6.7x(Code K)	7.1x(Code L)	7.1x(Code L)
No load current [A]	3.80/1.90	1.90	2.05	2.15	2.15
Rated speed [RPM]	1170	960	965	965	965
Slip [%]	2.50	4.00	3.50	3.50	3.50
Rated torque [ft.lb]	8.98	10.9	10.9	10.9	10.9
Locked rotor torque [%]	300	229	280	310	310
Breakdown torque [%]	350	260	310	340	340
Service factor	1.25	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	55s (cold) 31s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	85.4	84.8	84.8	84.2
	50%	86.5	85.5	85.5	85.0
	75%	87.5	86.0	86.5	86.5
	100%	88.5	86.5	87.0	87.0
Power Factor	25%	0.26	0.31	0.28	0.26
	50%	0.46	0.53	0.49	0.46
	75%	0.58	0.65	0.62	0.59
	100%	0.66	0.72	0.69	0.67
Bearing type	: Drive end : 6307 ZZ Non drive end : 6206 ZZ	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction : 185 lb			
Lubrication interval	: - -	Max. compression : 287 lb			
Lubricant amount	: - -				
Lubricant type	: Mobil Polyrex EM				
Notes					
USABLE @208V 7.13A SF 1.15 SFA 8.20A					
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

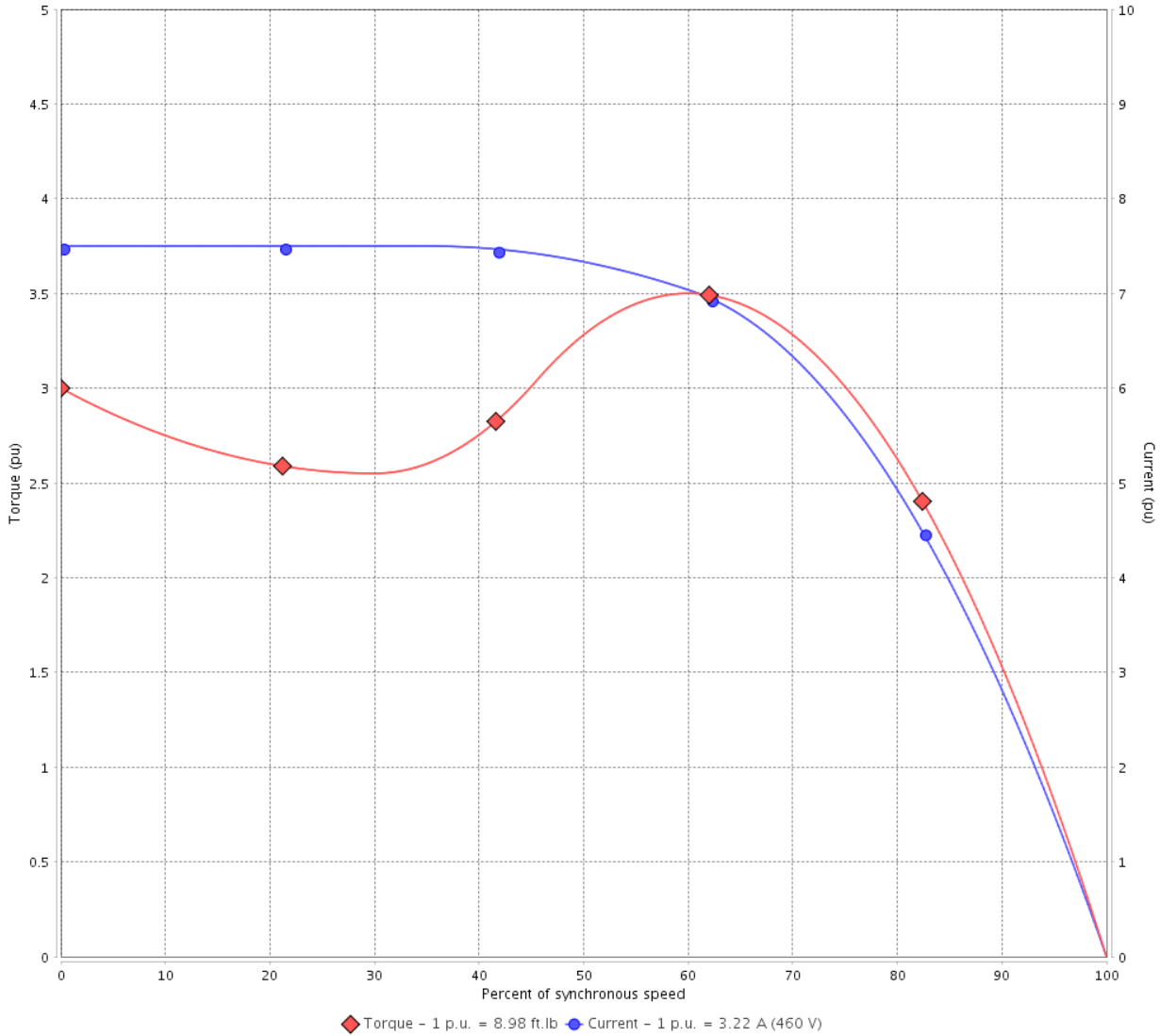
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 6P

Rated current	: 6.44/3.22 A	Moment of inertia (J)	: 0.6210 sq.ft.lb
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 8.98 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1170 rpm	Design	: B

Locked rotor time : 55s (cold) 31s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



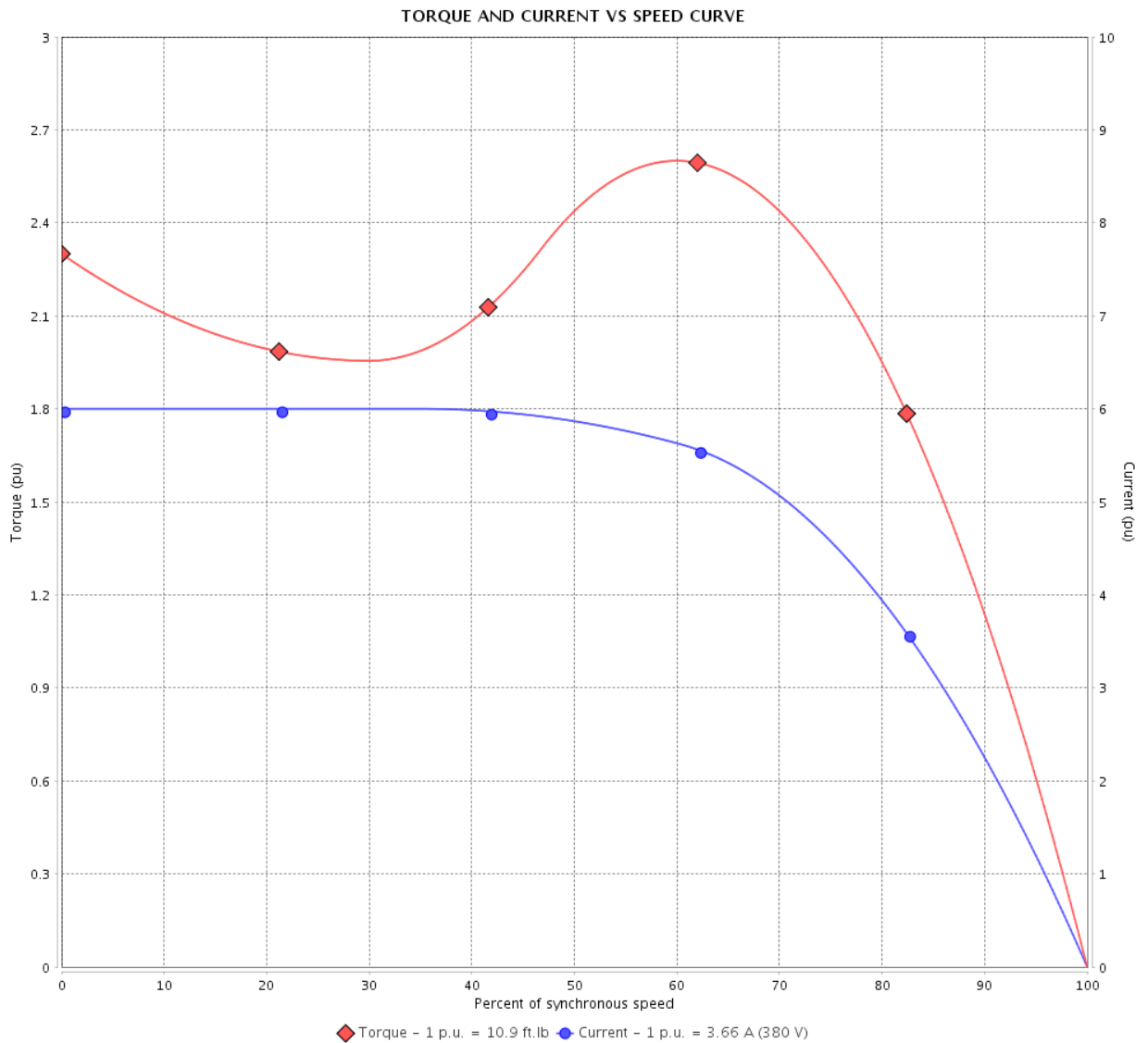
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22



Performance : 380 V 50 Hz 6P IE4

Rated current	: 3.66 A	Moment of inertia (J)	: 0.6210 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



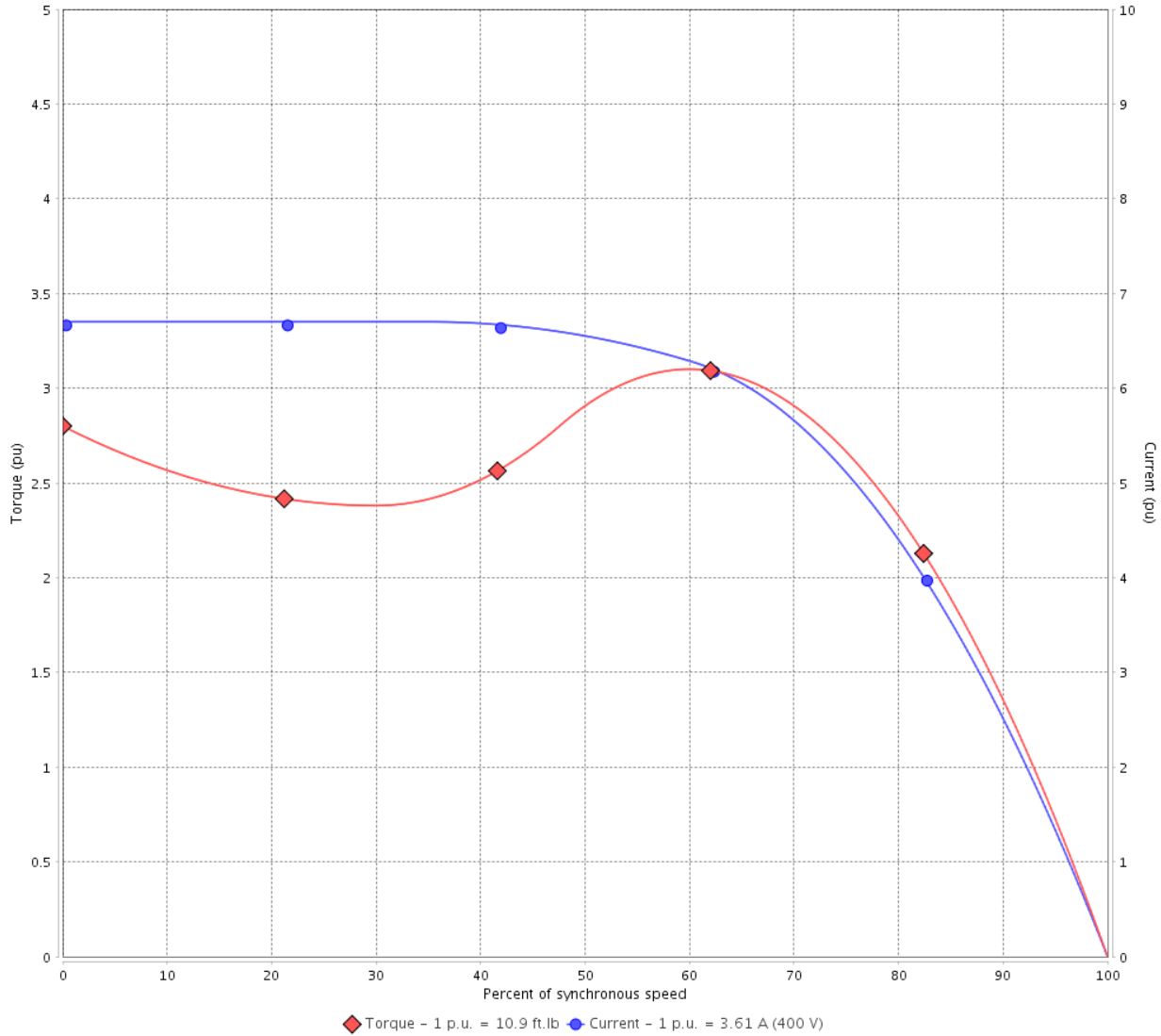
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 6P IE4

Rated current	: 3.61 A	Moment of inertia (J)	: 0.6210 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



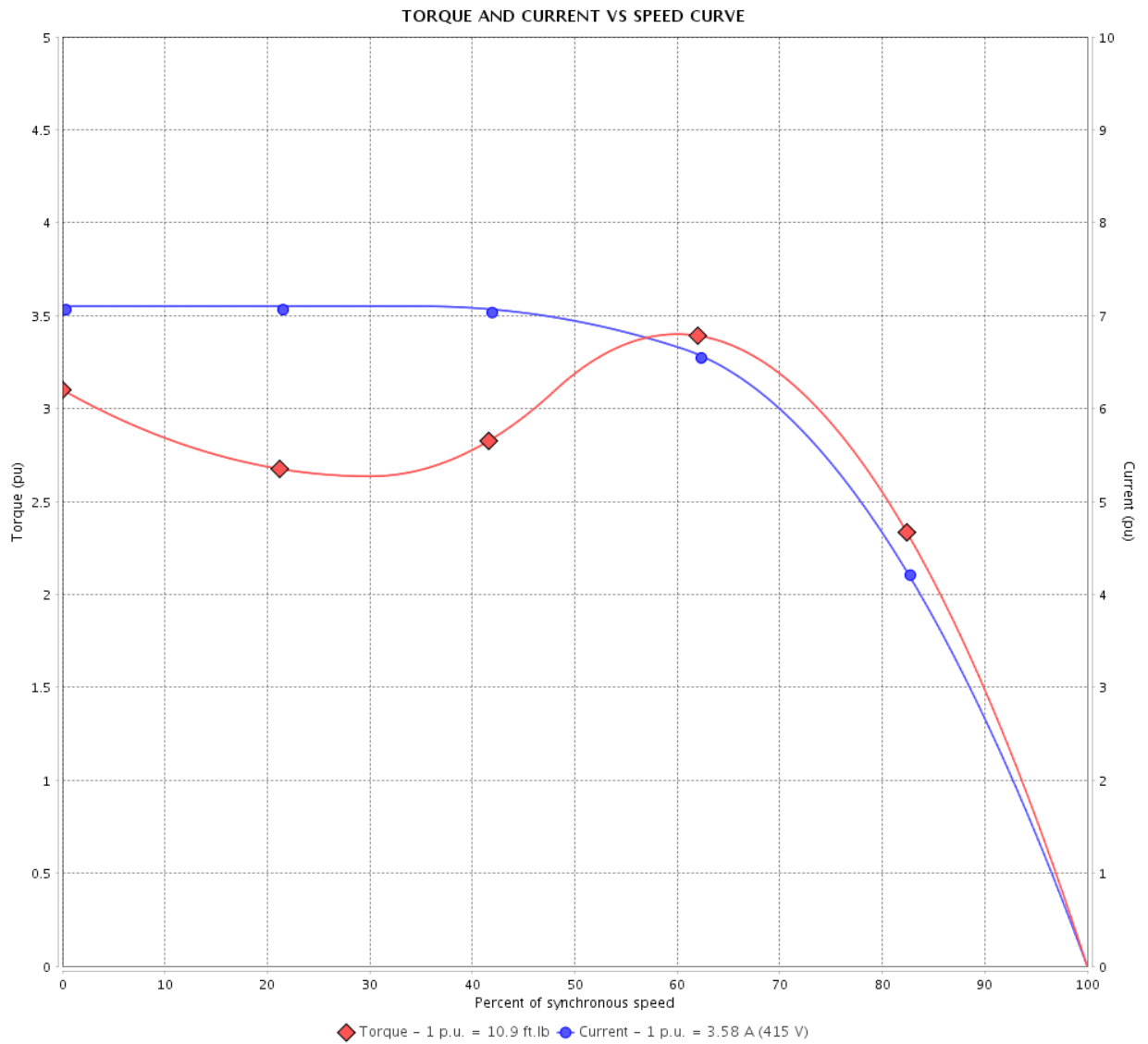
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22



Performance : 415 V 50 Hz 6P IE4

Rated current	: 3.58 A	Moment of inertia (J)	: 0.6210 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



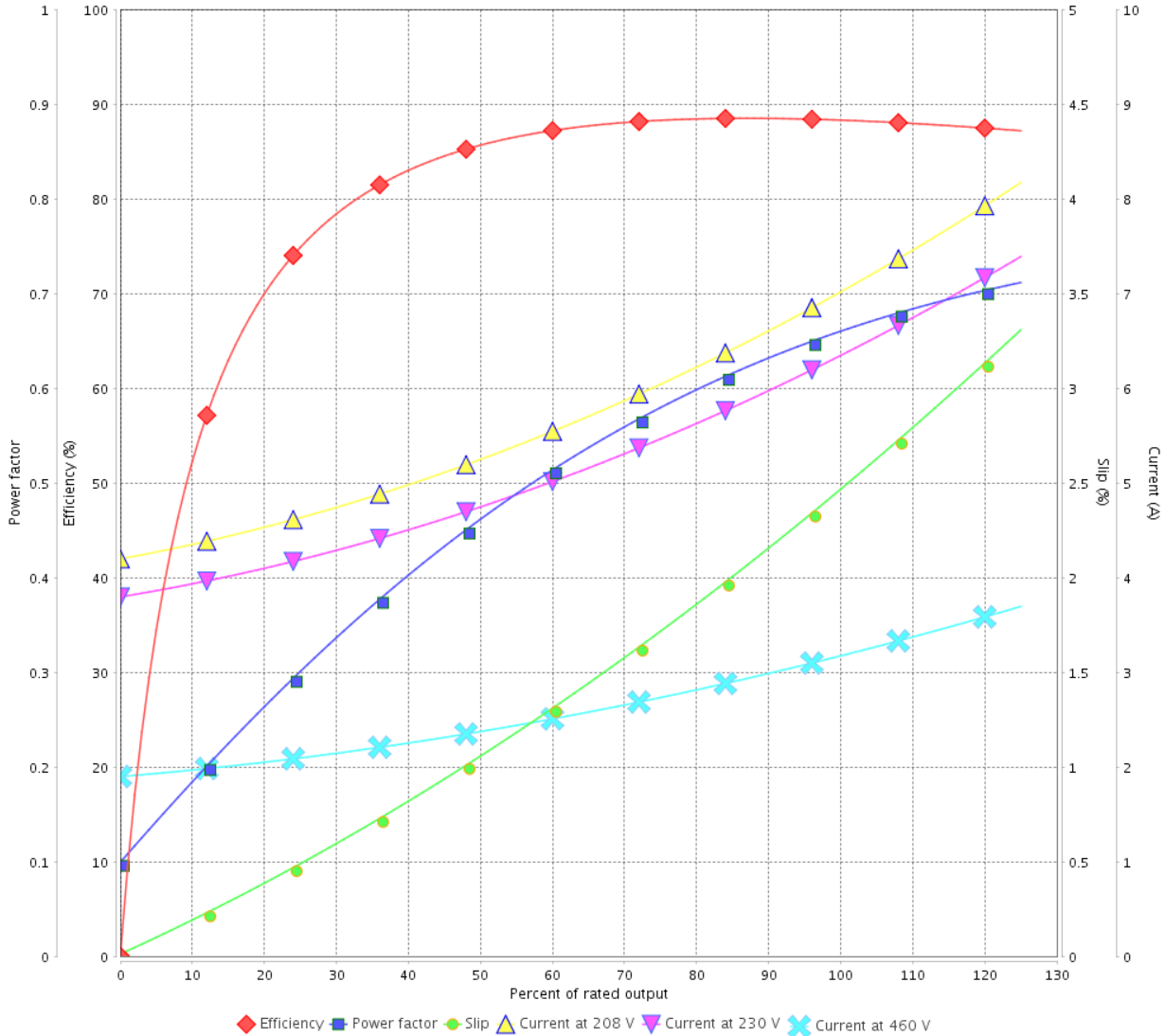
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 6.44/3.22 A
 LRC : 7.5
 Rated torque : 8.98 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 350 %
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.6210 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

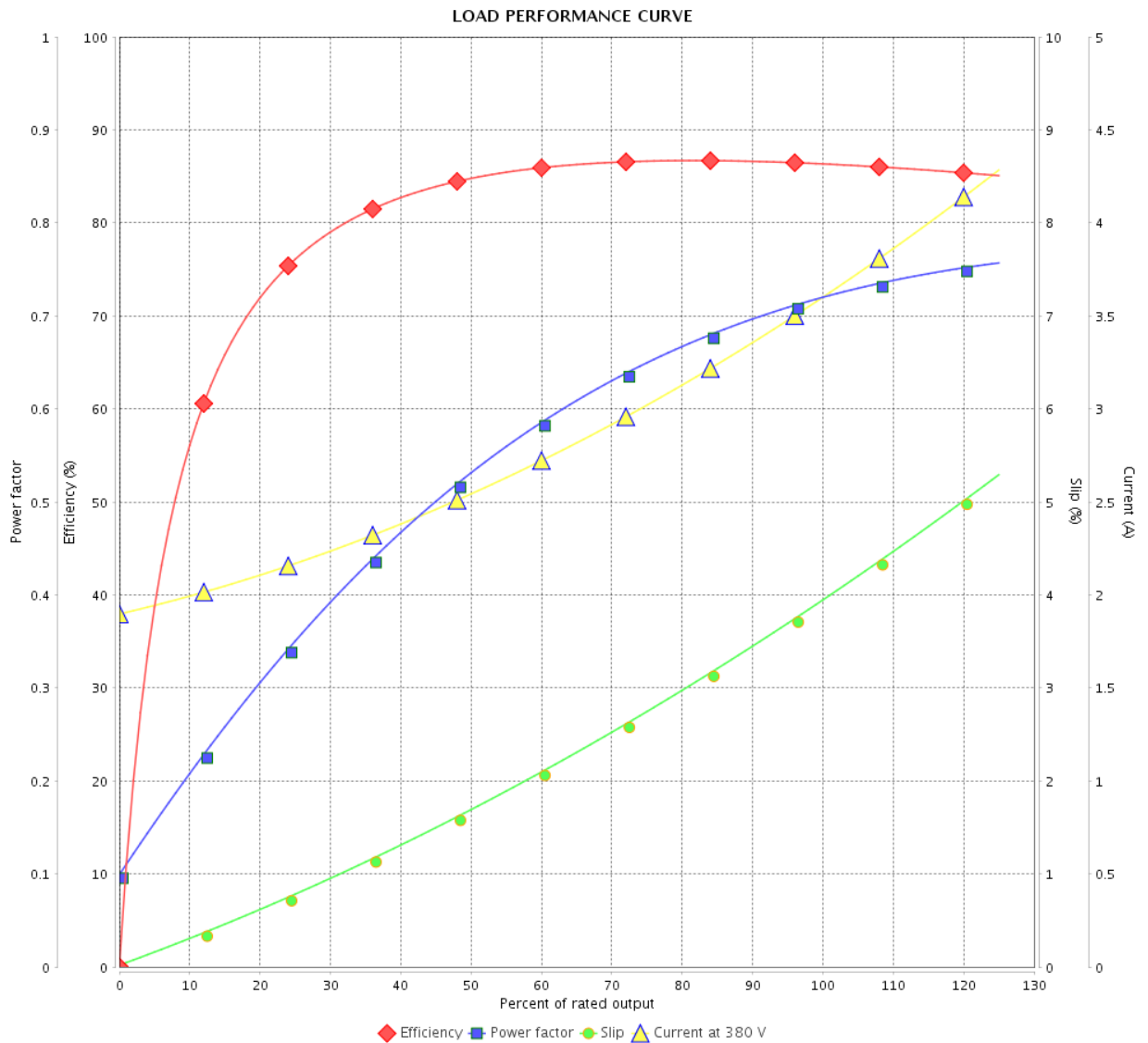


Customer :

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Product code : 14318122

Catalog # : 00212ET3E184JP-W22



Performance : 380 V 50 Hz 6P IE4

Rated current : 3.66 A
 LRC : 6.0
 Rated torque : 10.9 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 260 %
 Rated speed : 960 rpm

Moment of inertia (J) : 0.6210 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage



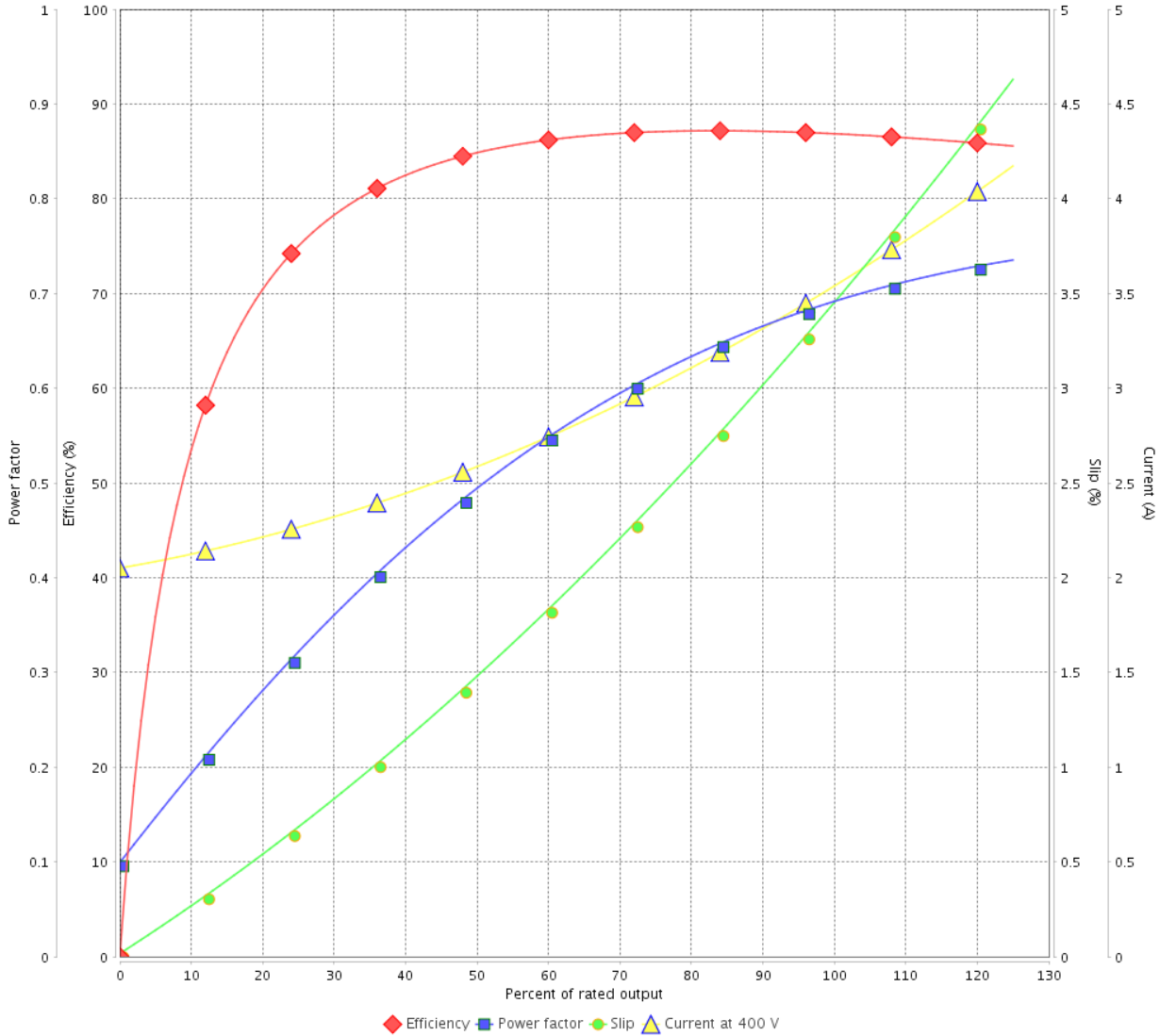
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE4

Rated current : 3.61 A
 LRC : 6.7
 Rated torque : 10.9 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 310 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.6210 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

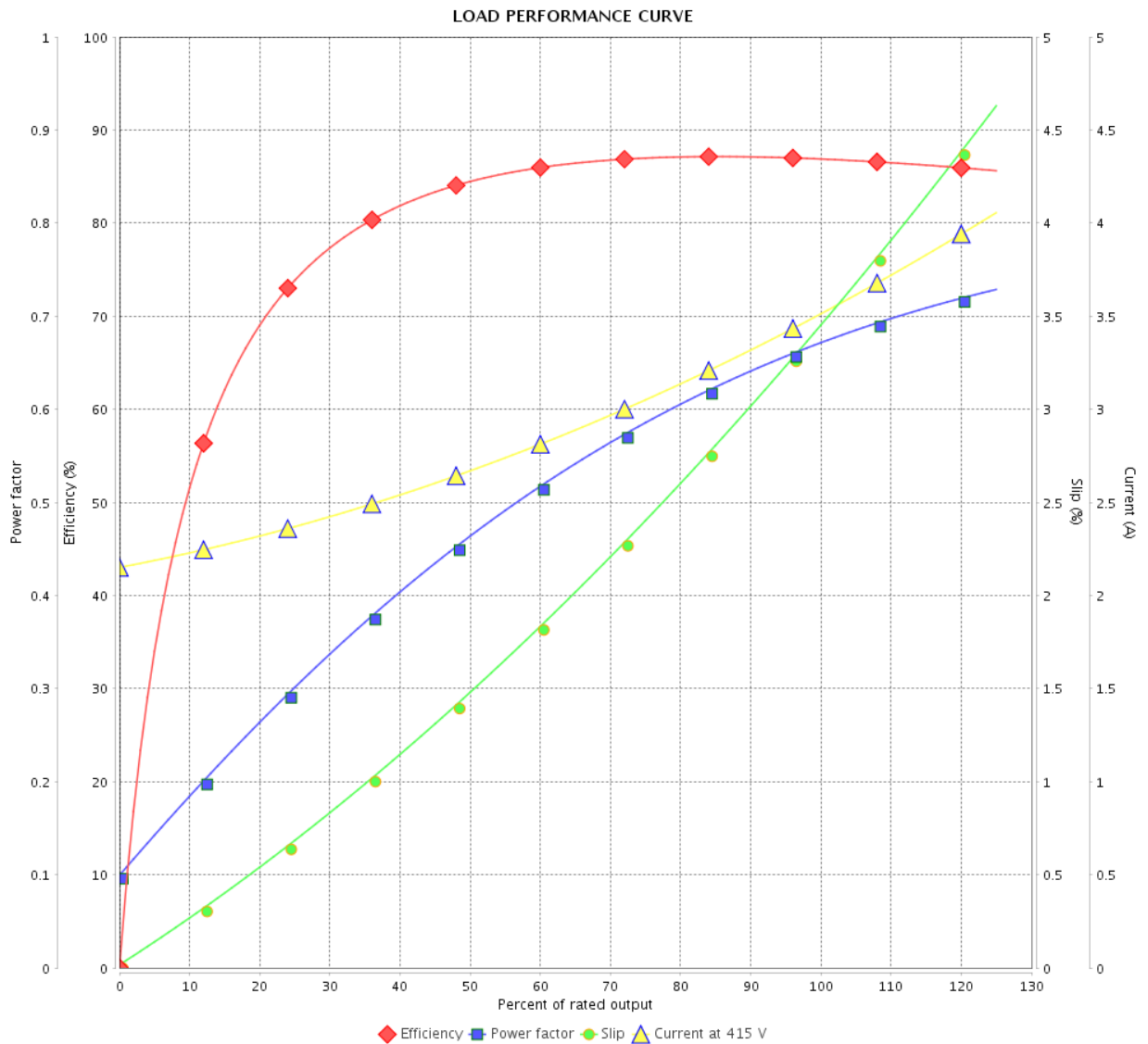


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22



Performance : 415 V 50 Hz 6P IE4

Rated current : 3.58 A
 LRC : 7.1
 Rated torque : 10.9 ft.lb
 Locked rotor torque : 310 %
 Breakdown torque : 340 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.6210 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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Performance : 230/460 V 60 Hz 6P

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LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 8.98 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 1170 rpm	Design	: B

Heating constant

Cooling constant

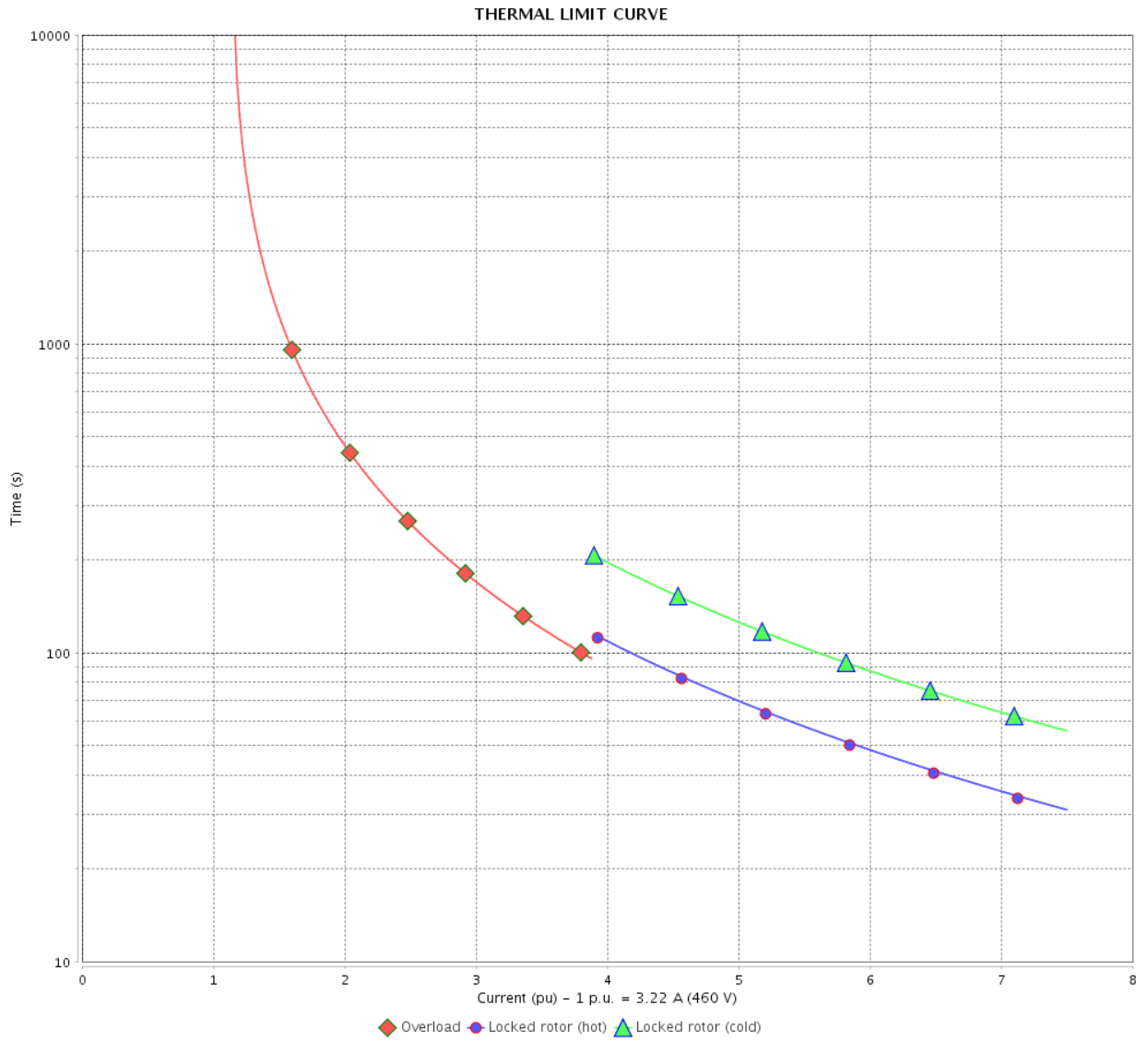
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 14318122
Catalog # : 00212ET3E184JP-W22

Performance : 380 V 50 Hz 6P IE4

Rated current	: 3.66 A	Moment of inertia (J)	: 0.6210 sq.ft.lb
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

Heating constant

Cooling constant

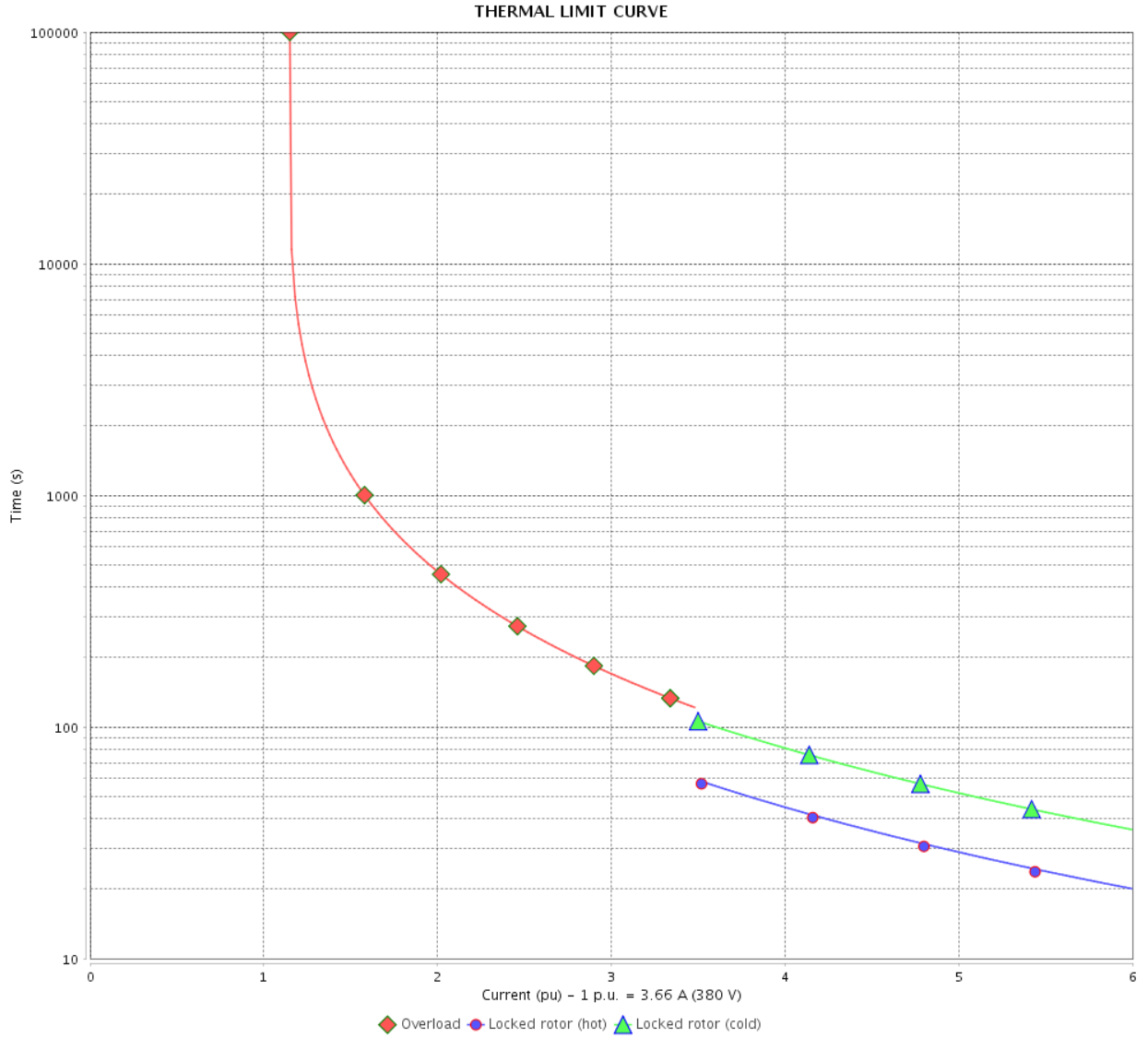
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THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 14318122
Catalog # : 00212ET3E184JP-W22

Performance : 400 V 50 Hz 6P IE4

Rated current	: 3.61 A	Moment of inertia (J)	: 0.6210 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Heating constant

Cooling constant

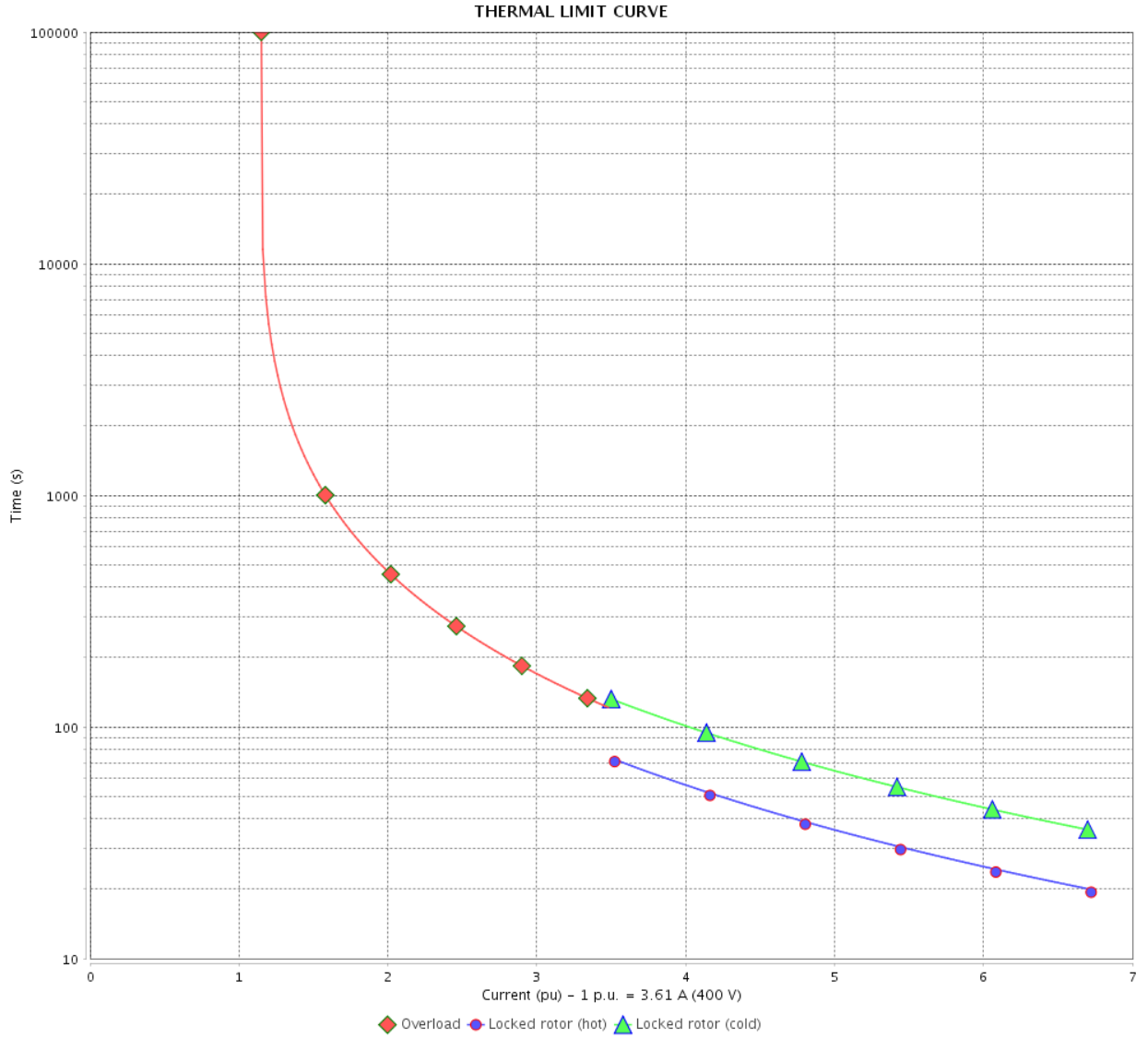
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Three Phase Induction Motor - Squirrel Cage



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Three Phase Induction Motor - Squirrel Cage



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Product line : NEMA Premium Efficiency Three-Phase
Product code : 14318122
Catalog # : 00212ET3E184JP-W22

Performance : 415 V 50 Hz 6P IE4

Rated current	: 3.58 A	Moment of inertia (J)	: 0.6210 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 10.9 ft.lb	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 965 rpm	Design	: B

Heating constant

Cooling constant

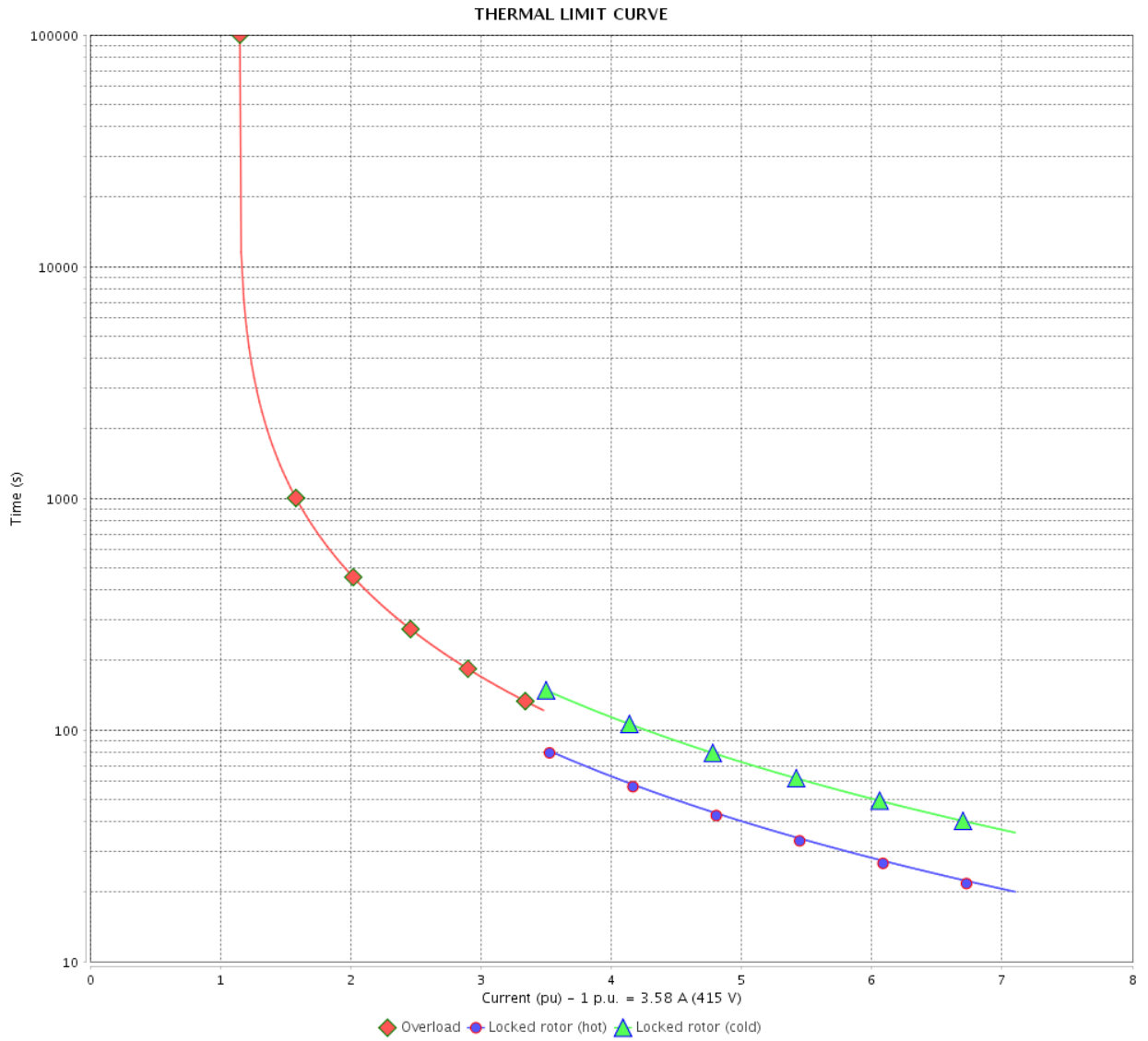
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



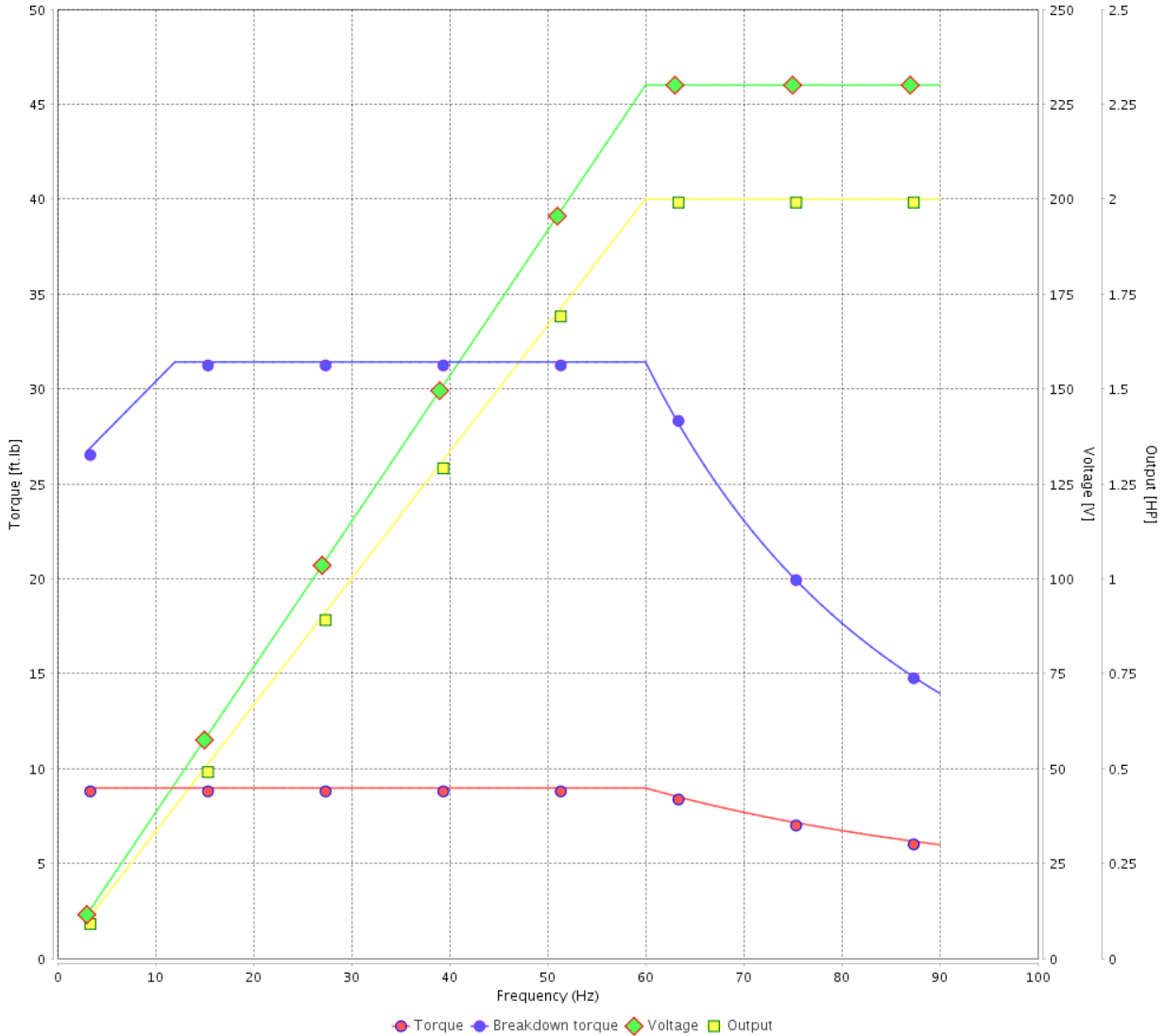
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22

VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 6P

Rated current : 6.44/3.22 A
 LRC : 7.5
 Rated torque : 8.98 ft.lb
 Locked rotor torque : 300 %
 Breakdown torque : 350 %
 Rated speed : 1170 rpm

Moment of inertia (J) : 0.6210 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

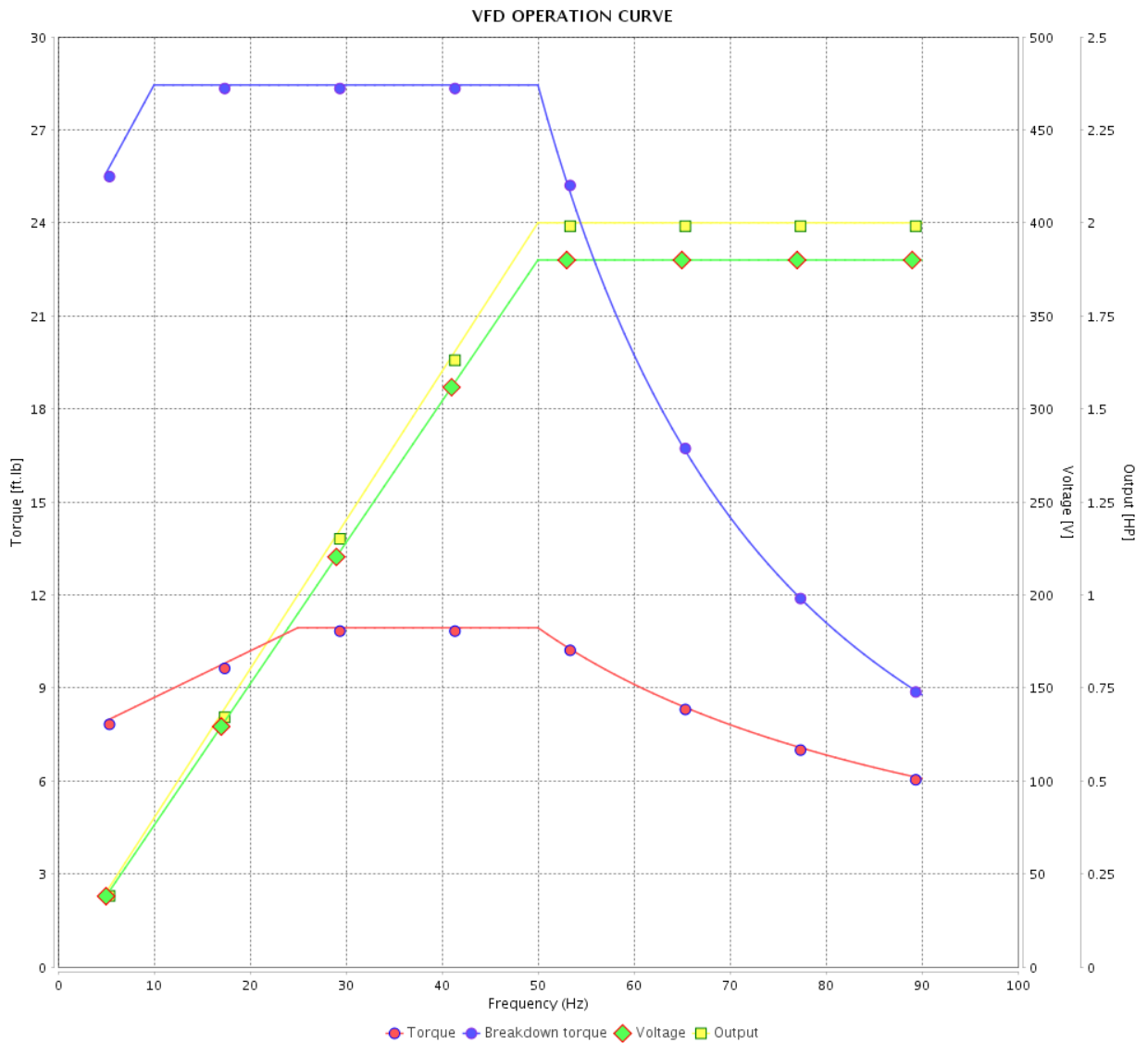


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22



Performance : 380 V 50 Hz 6P IE4

Rated current : 3.66 A
 LRC : 6.0
 Rated torque : 10.9 ft.lb
 Locked rotor torque : 229 %
 Breakdown torque : 260 %
 Rated speed : 960 rpm

Moment of inertia (J) : 0.6210 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



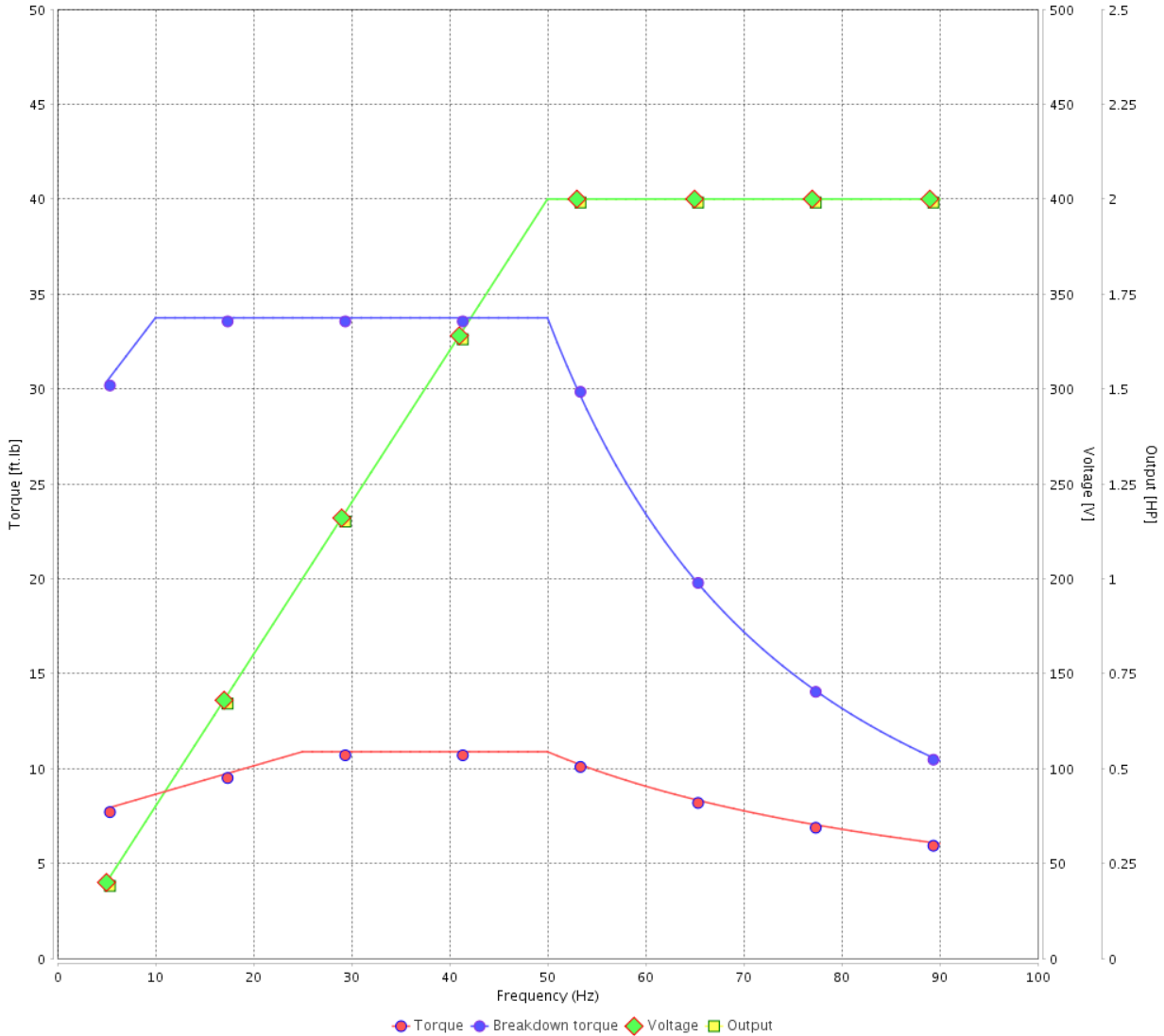
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14318122

Catalog # : 00212ET3E184JP-W22

VFD OPERATION CURVE



Performance : 400 V 50 Hz 6P IE4

Rated current : 3.61 A
 LRC : 6.7
 Rated torque : 10.9 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 310 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.6210 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

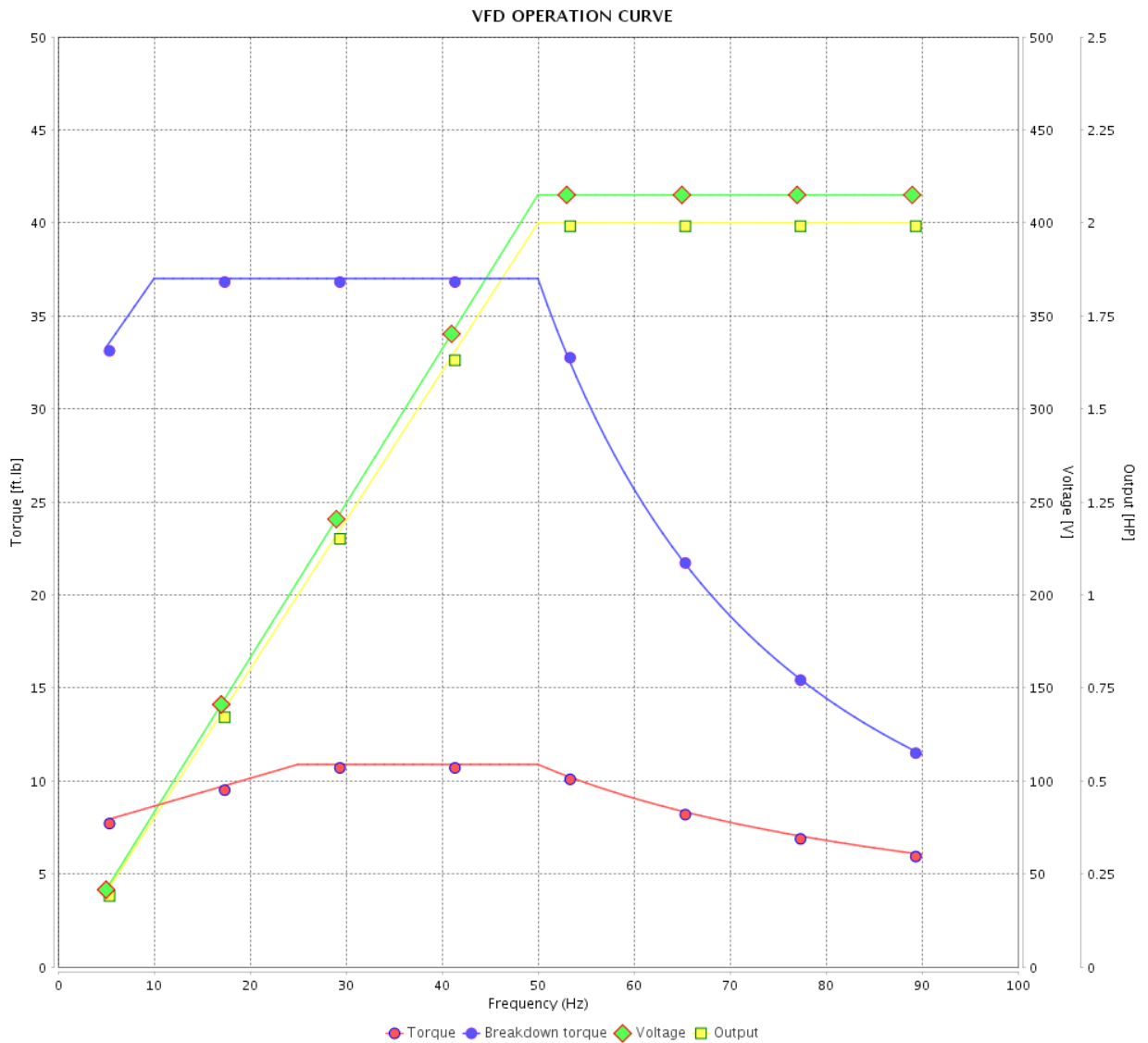


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Catalog # : 00212ET3E184JP-W22



Performance : 415 V 50 Hz 6P IE4

Rated current : 3.58 A
 LRC : 7.1
 Rated torque : 10.9 ft.lb
 Locked rotor torque : 310 %
 Breakdown torque : 340 %
 Rated speed : 965 rpm

Moment of inertia (J) : 0.6210 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

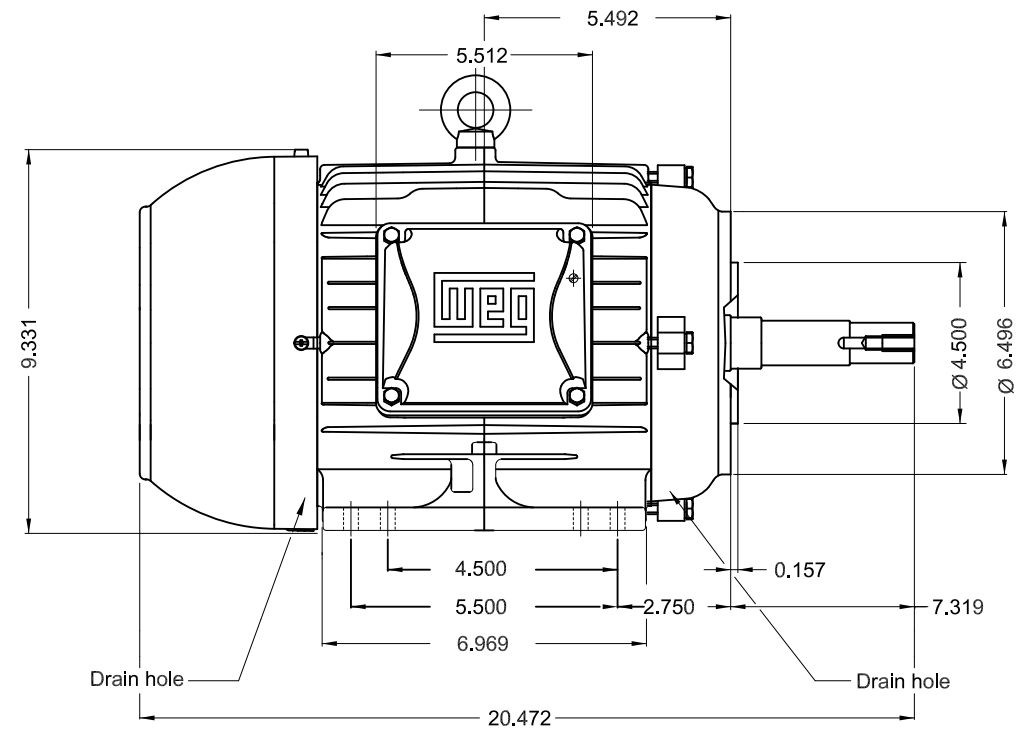
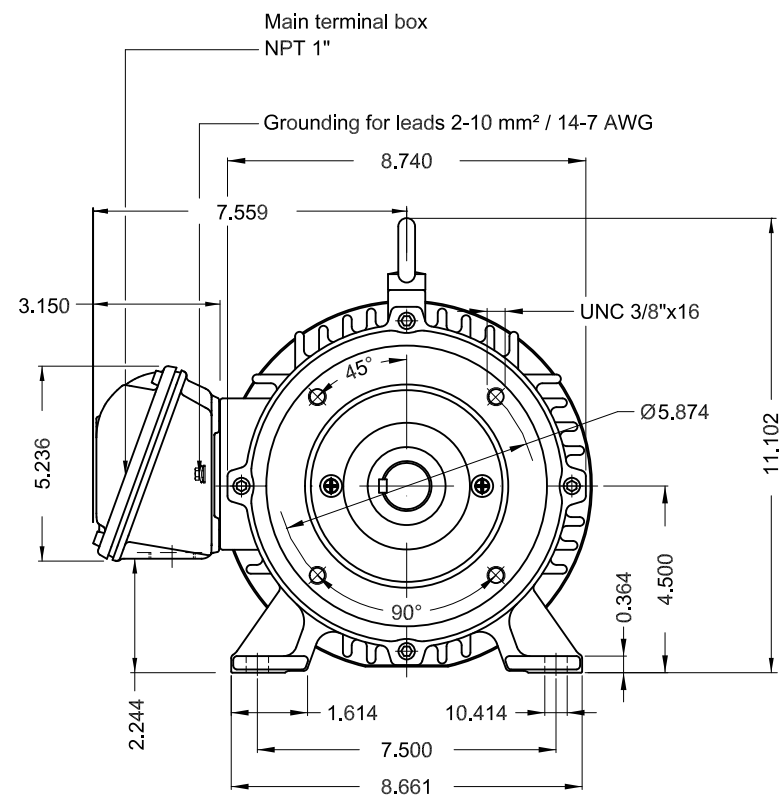
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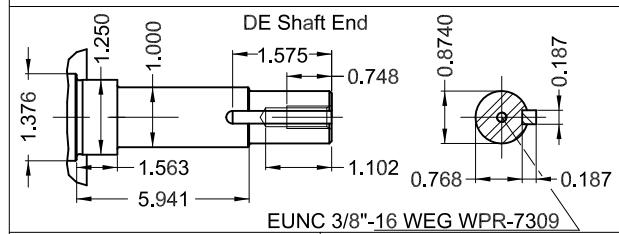
A

B

C



D



E

Color RAL 5009
 Painting plan 207A
 Mounting NEMA F-1
 Mounting B34R(D)

2 HP 06 Poles 60 Hz

A

ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER		THREE PH. MOTOR JM/JP/JET PUMP W22 PREM. EFF.			<p>PREVIEW</p> <p>WDD</p>		SHEET	1 / 1
CHECKED			FRAME 182/4JP IP55 TEFC						
RELEASED									
REL DT.			WMO	Jaragua do Sul	Product Engineering				

Dimensions in inches

XME A3

**W22**

CC029A

® Inverter Duty Motor
Severe Duty

14318122

MADE IN BRAZIL MODEL 00212ET3E184JP-W22

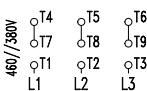
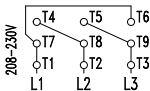
PH 3 | FR 182/4JP | HP(kW) 2.0(1.5) | Hz 60 | SF 1.25 | PF 0.66

V 230/460 | A 6.44/3.22 | RPM 1170 | INS. CL. F ΔT 80 K | IP55

NEMA NOM EFF 88.5 % | DES B | DUTY CONT. | AMB 40°C

ENCL TEFC | SFA 8.05/4.03 | USABLE @208V 7.13 A | SF 1.15 | SFA 8.20

2.0HP 1.5kW 50Hz 380V 3.66A 960RPM SF1.00 EFF 86.5% (IE4) | CODE L



MOBIL POLYREX EM

ALT 1000 m.a.s.l. | 101 Lbs

For 60Hz: 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 - T5

For use on PWM, Gr. A, B, C, D, F and G
 VT1000:1, CT20:1, 1.0SF, T4A



FOR SAFE AREA
 MOD.TE1BFOXON