

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12189641		
		Catalog # :	00212ET3E184TC-W22		
Frame	: 182/4TC	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	: 104 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 : 6207 ZZ Non drive end : 6206 ZZ	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction : 184 lb			
Lubrication interval	: - -	Max. compression : 288 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



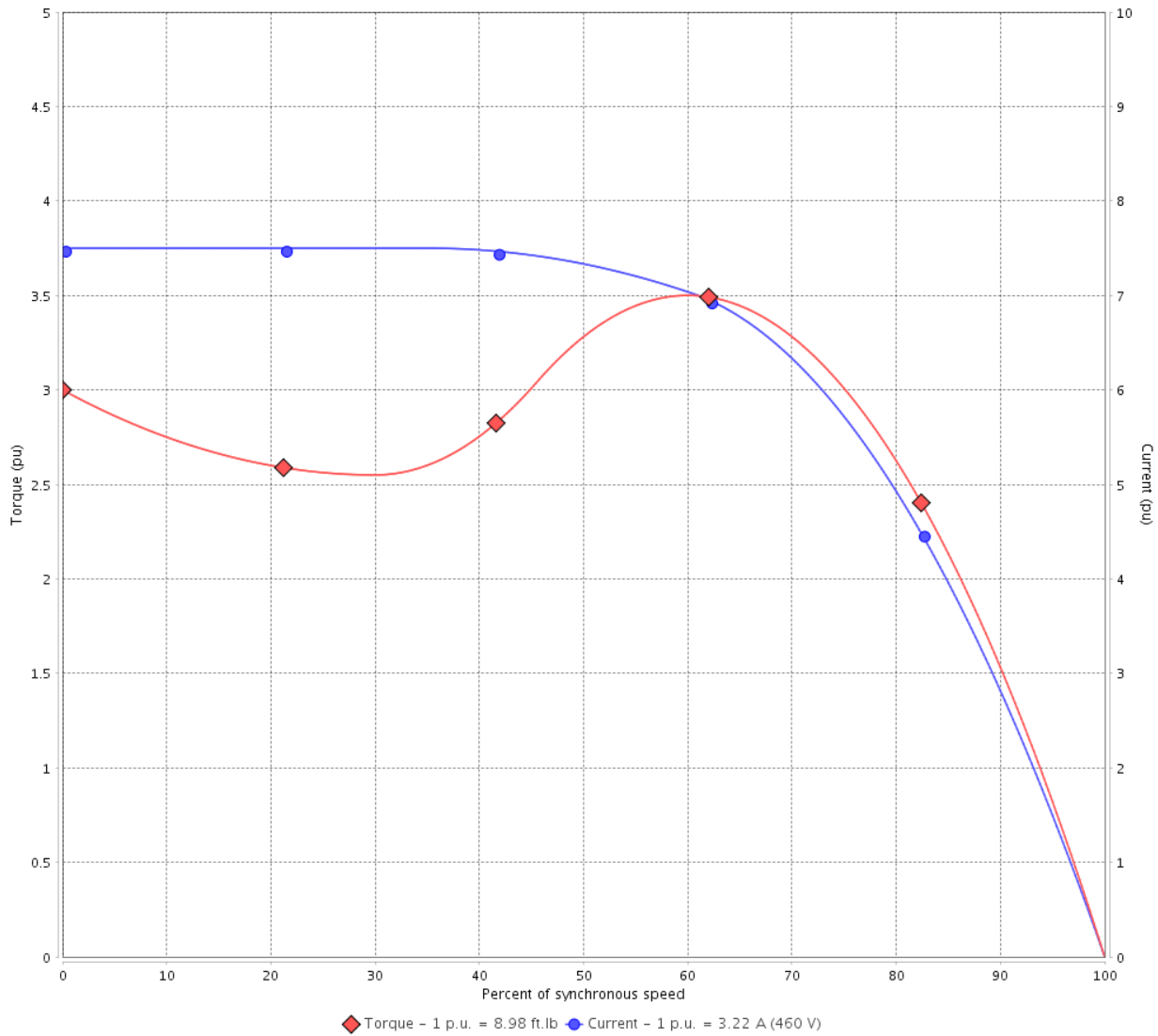
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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



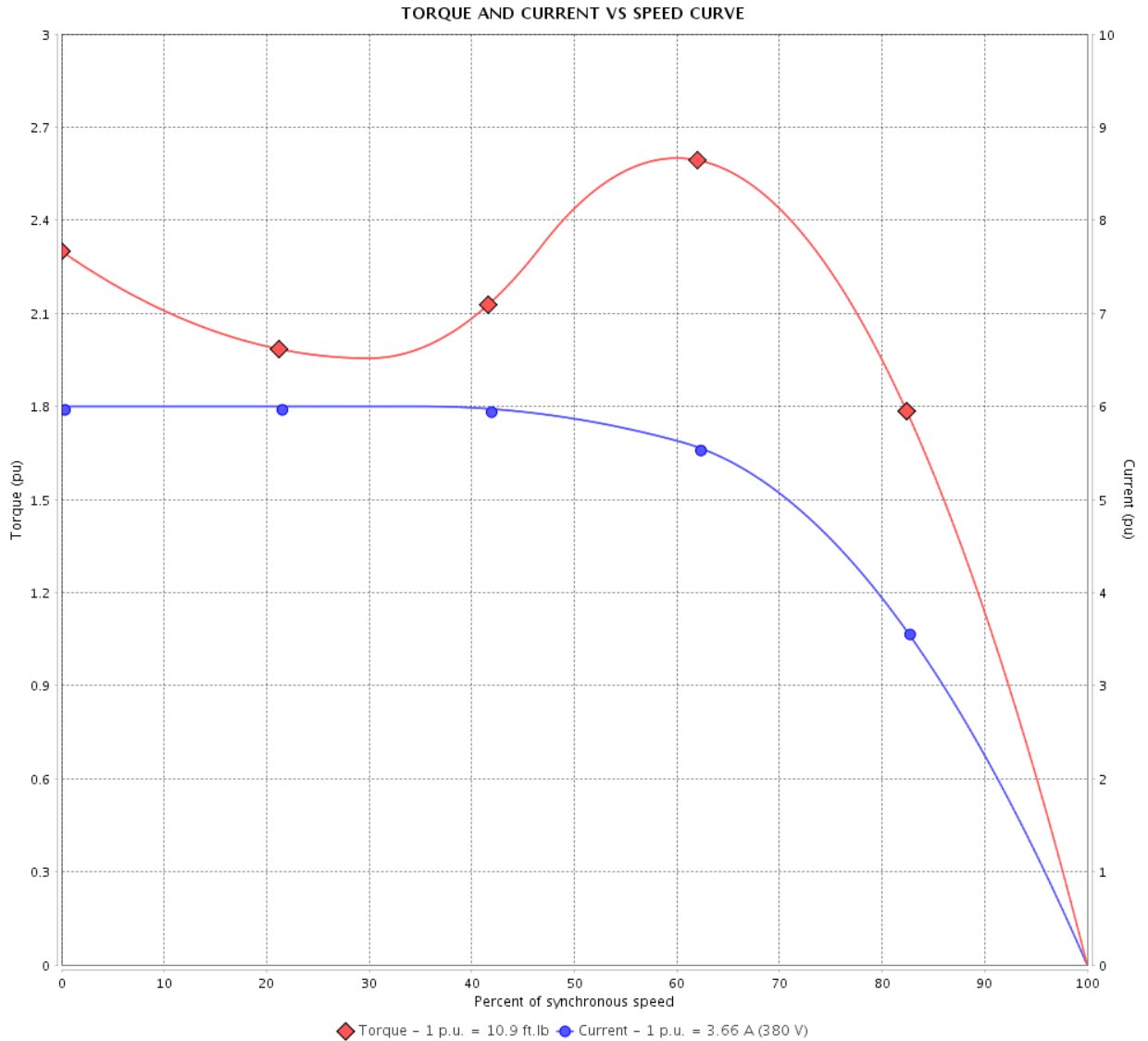
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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



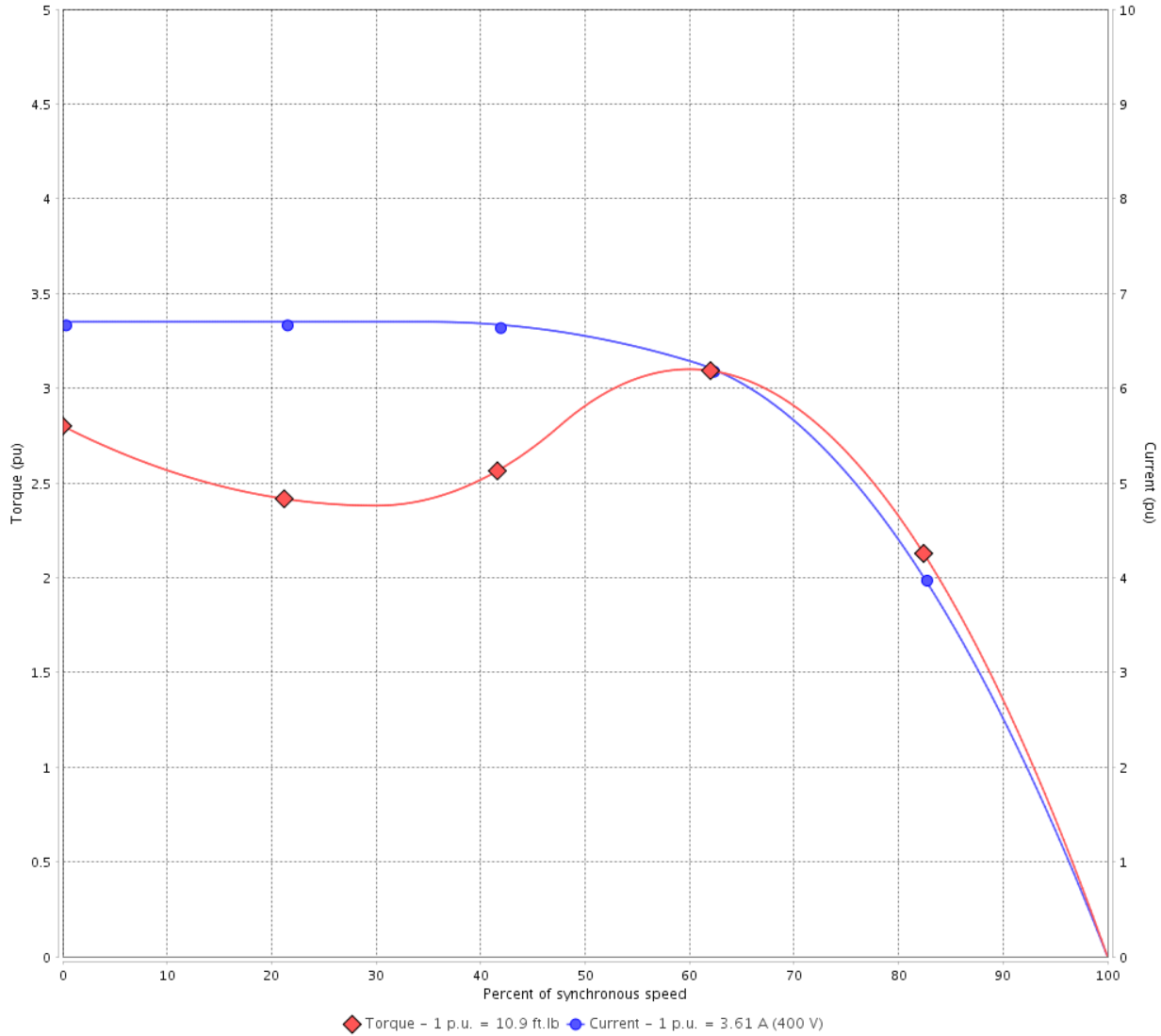
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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



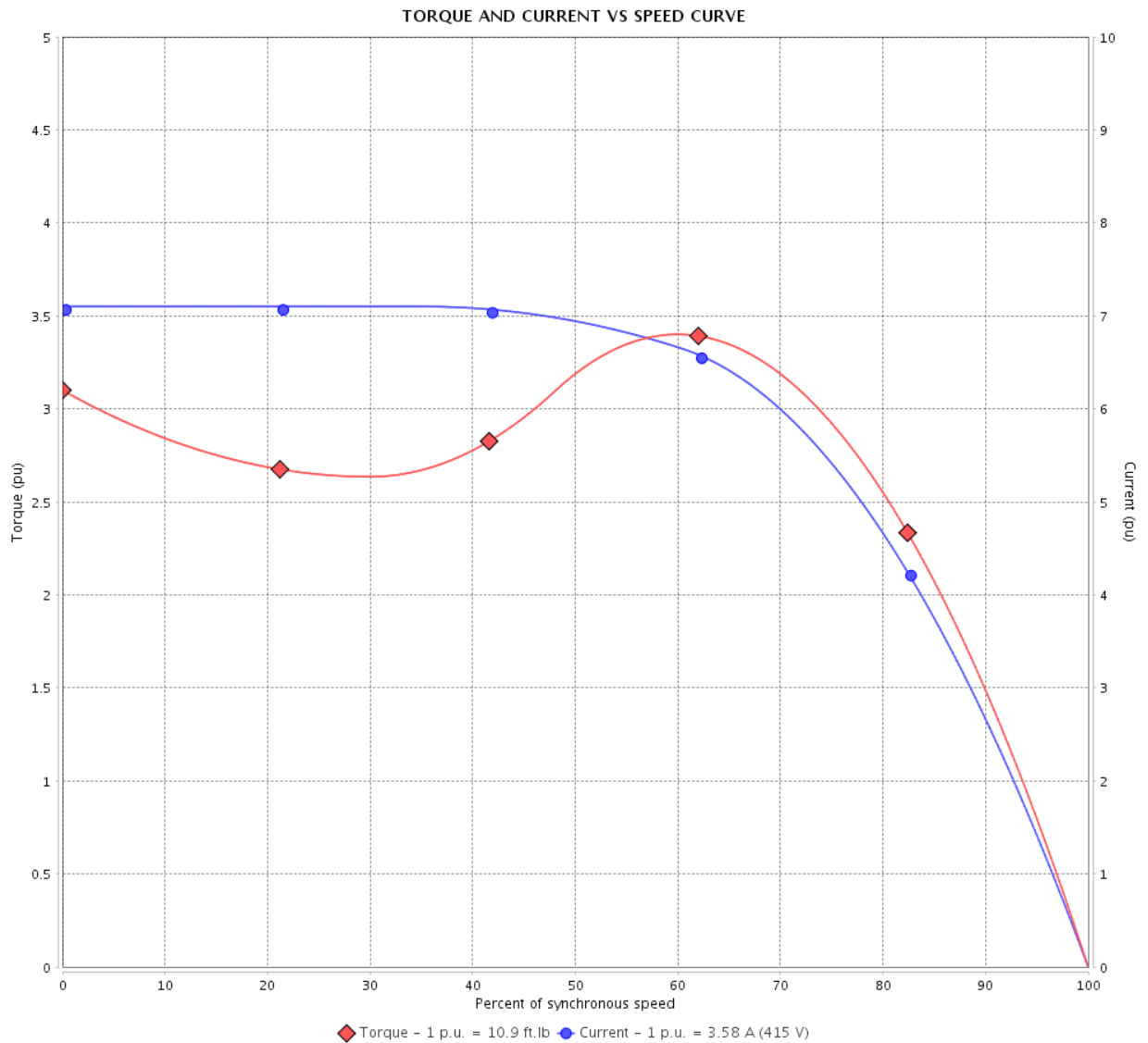
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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

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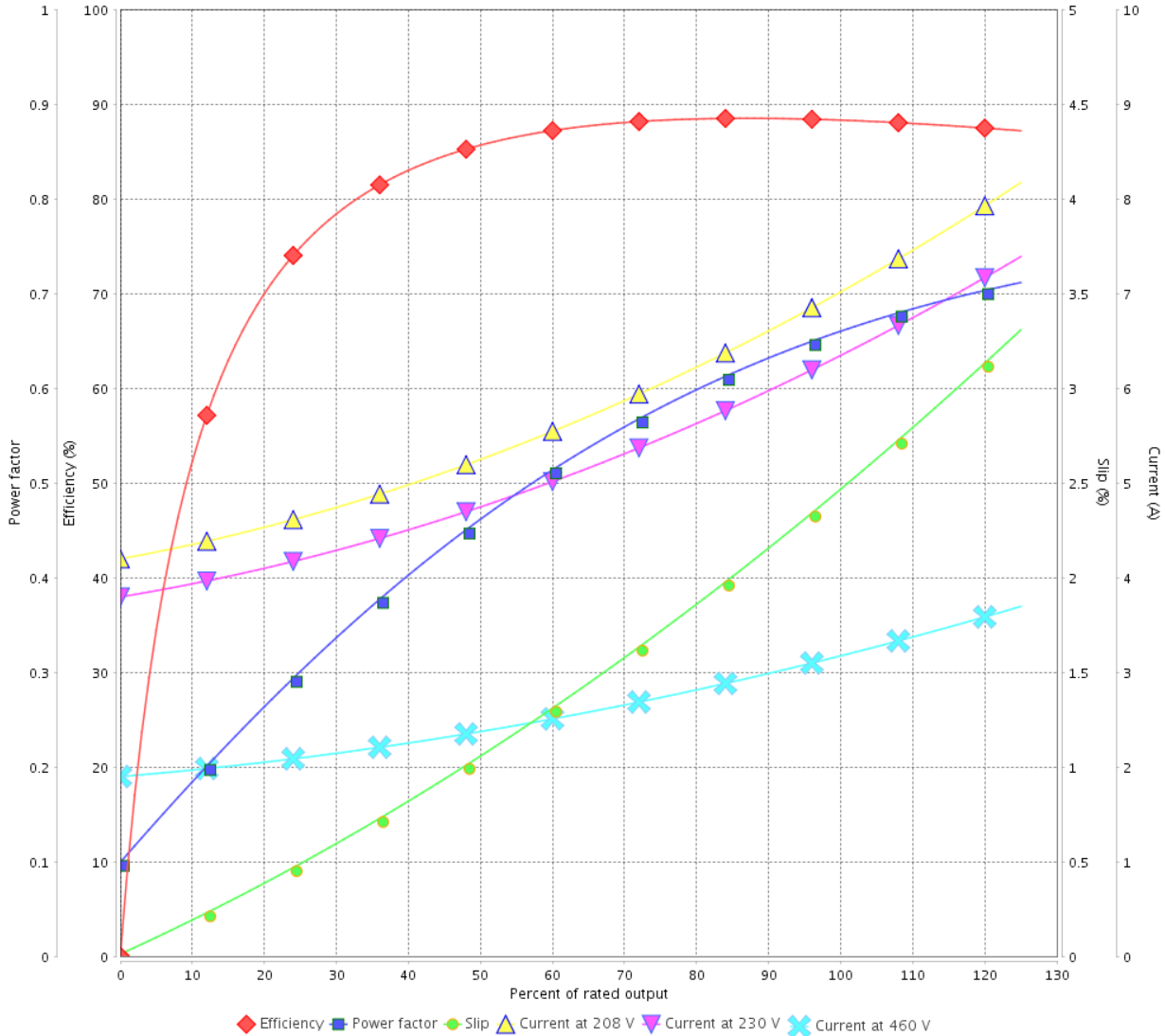
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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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LOAD PERFORMANCE CURVE

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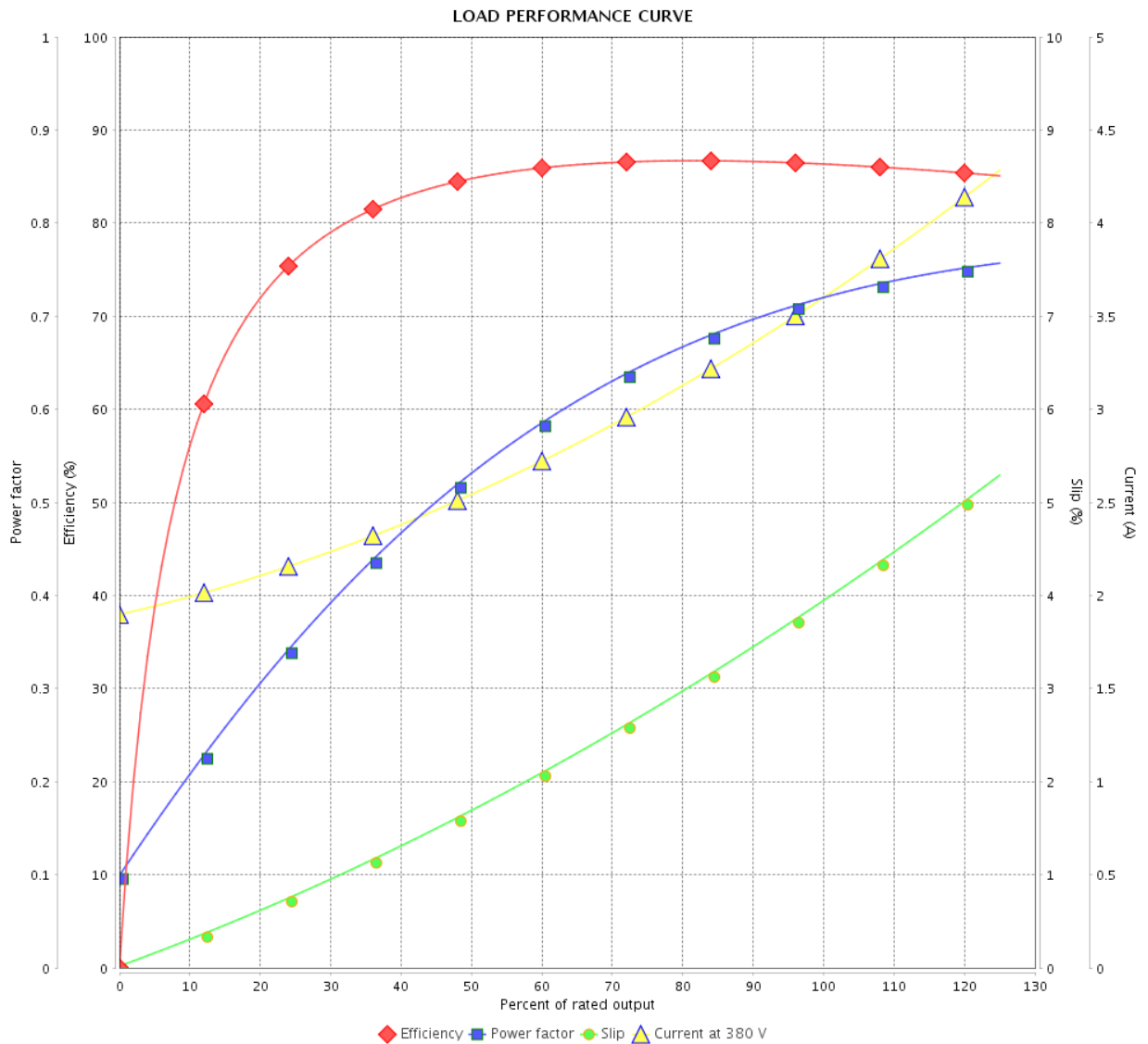


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Catalog # : 00212ET3E184TC-W22



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



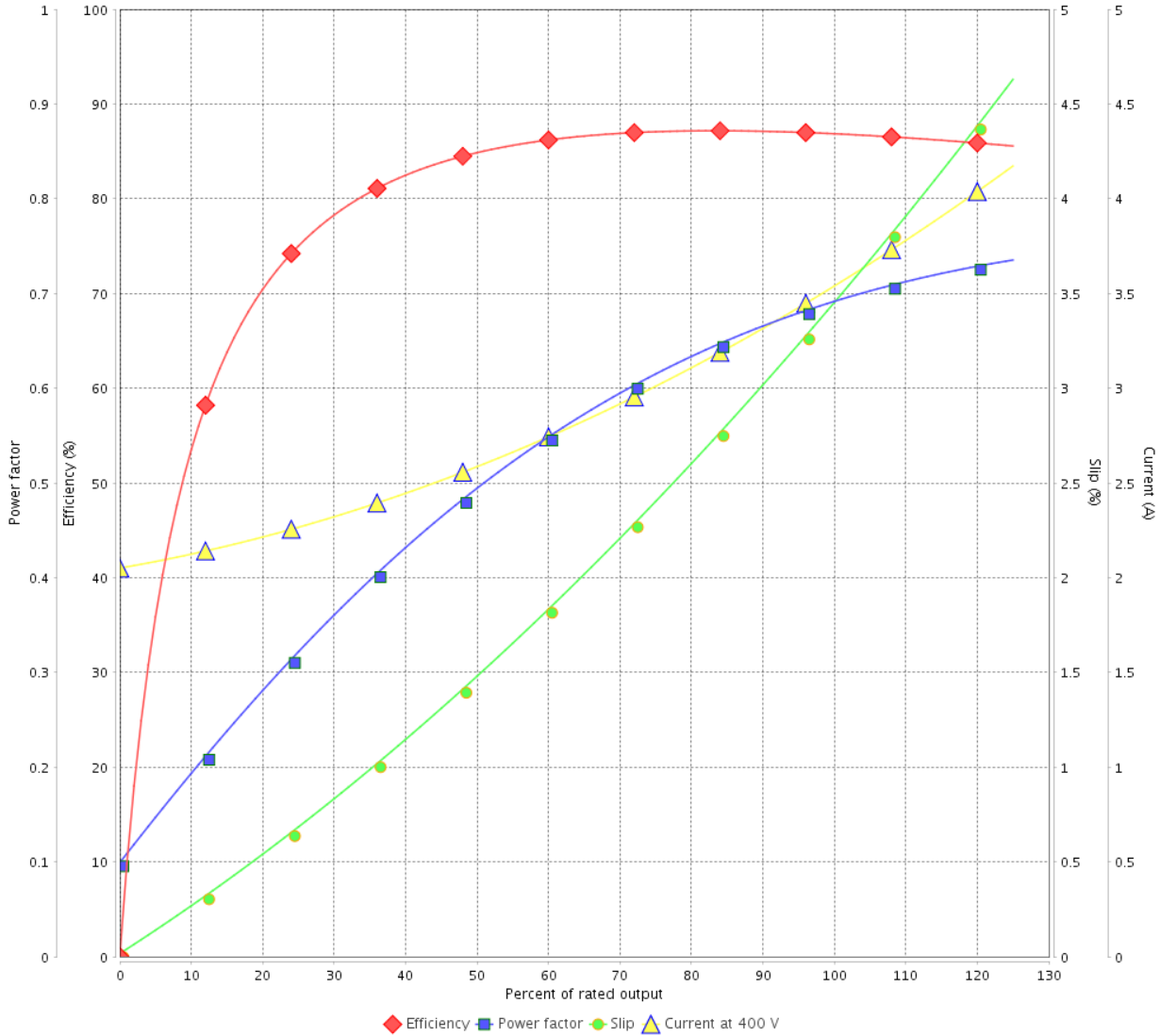
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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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Date	14/04/2022			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

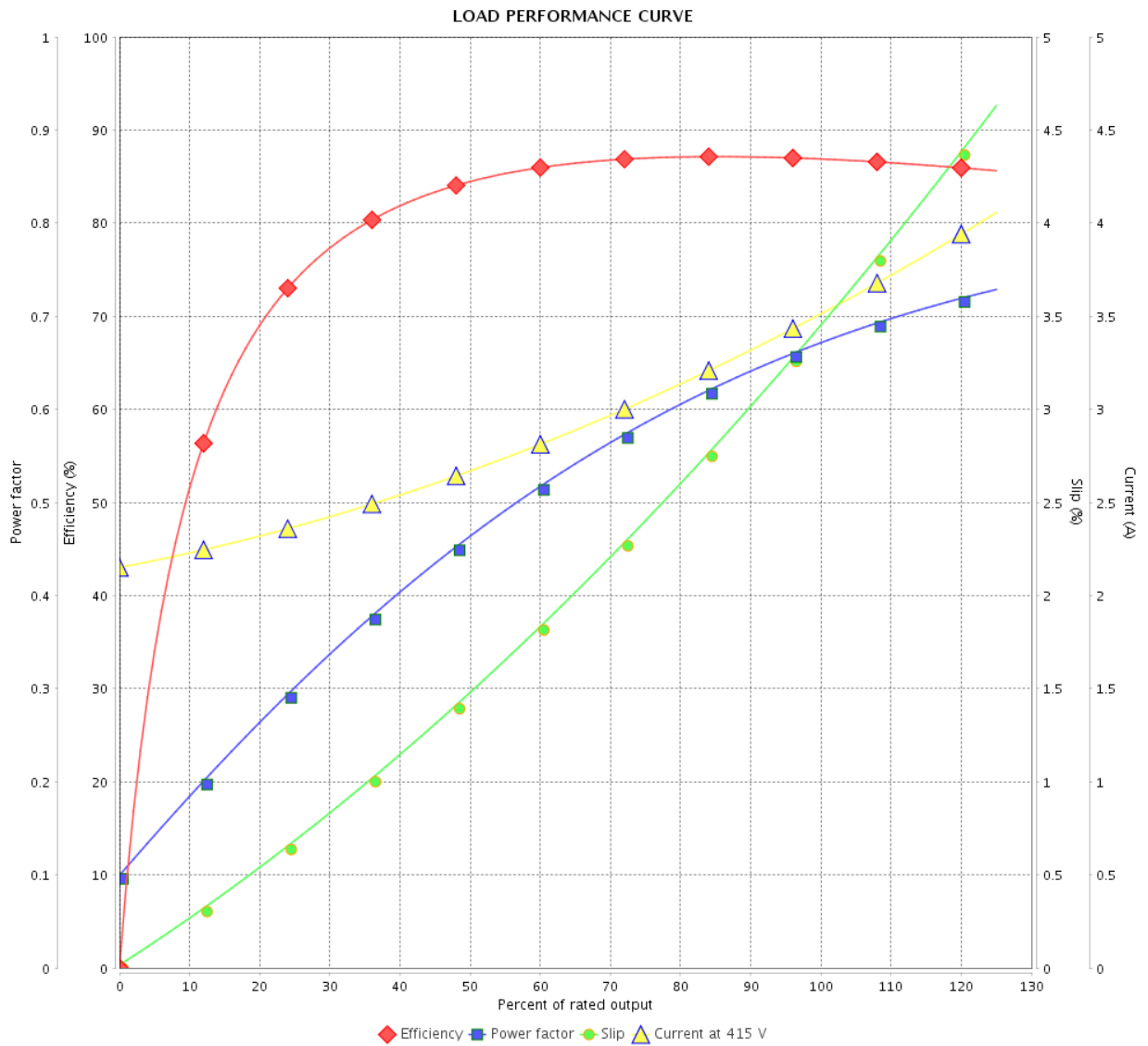


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Performance : 415 V 50 Hz 6P IE4

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



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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

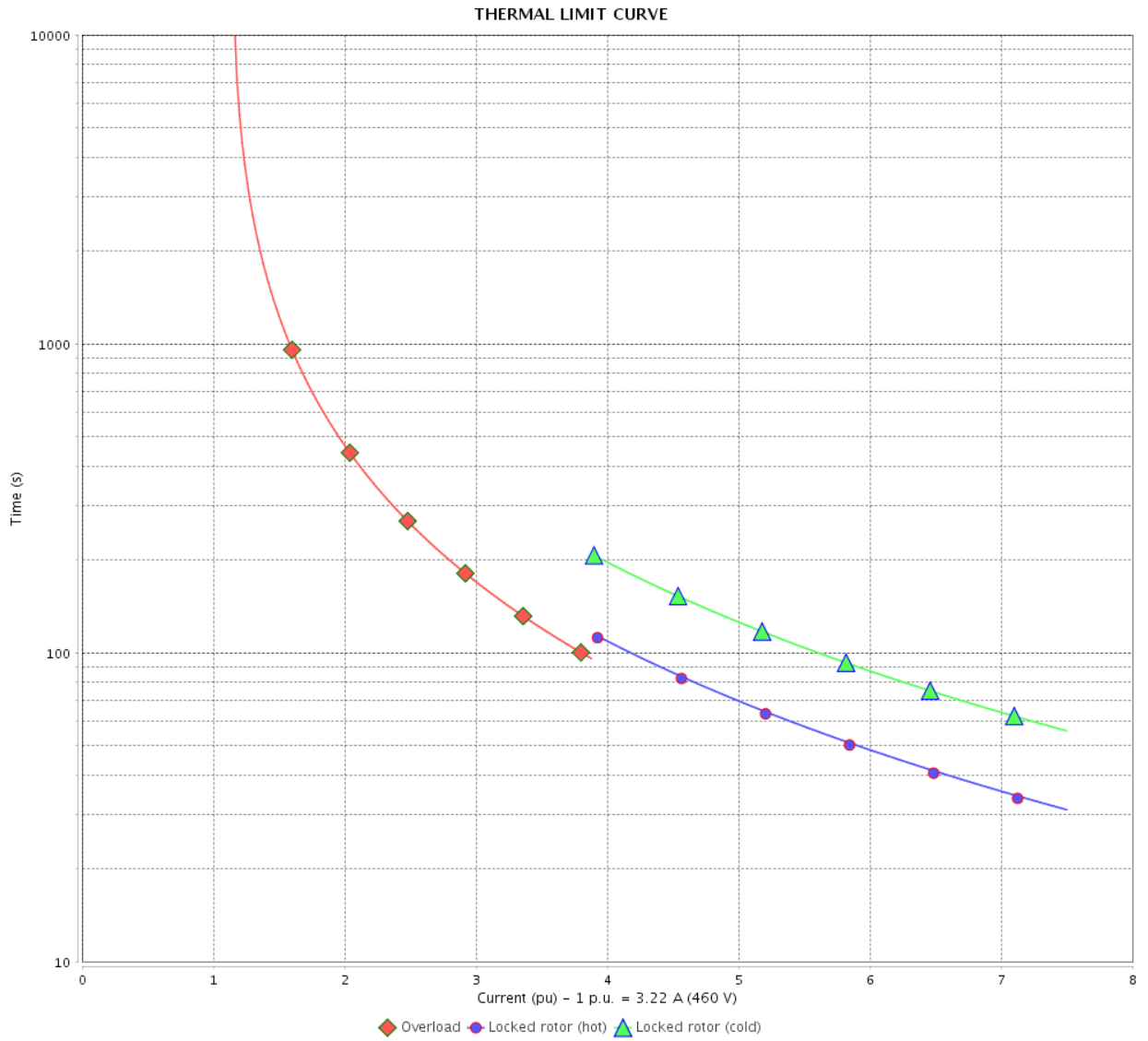
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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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

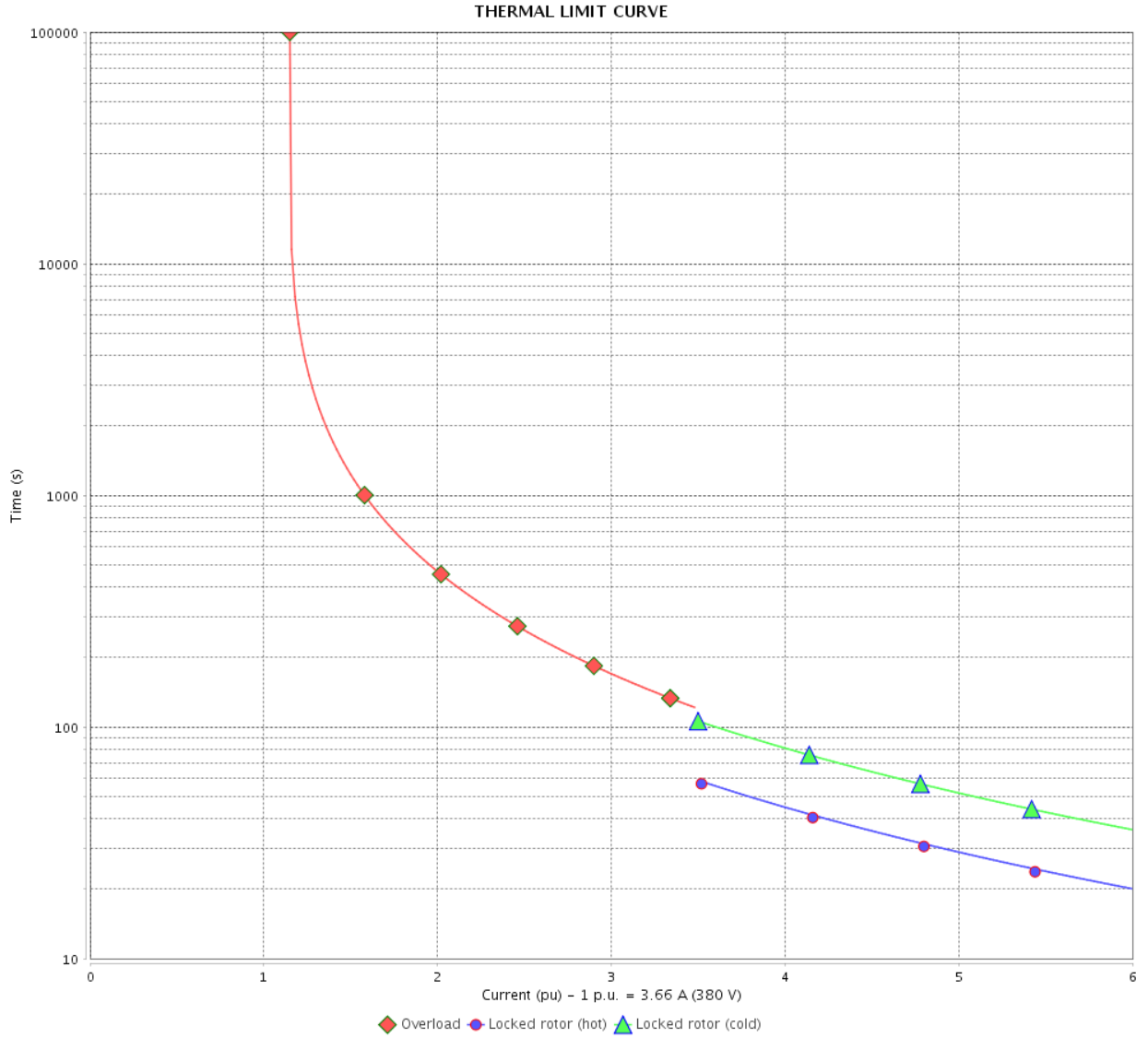
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THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-W22

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

Heating constant

Cooling constant

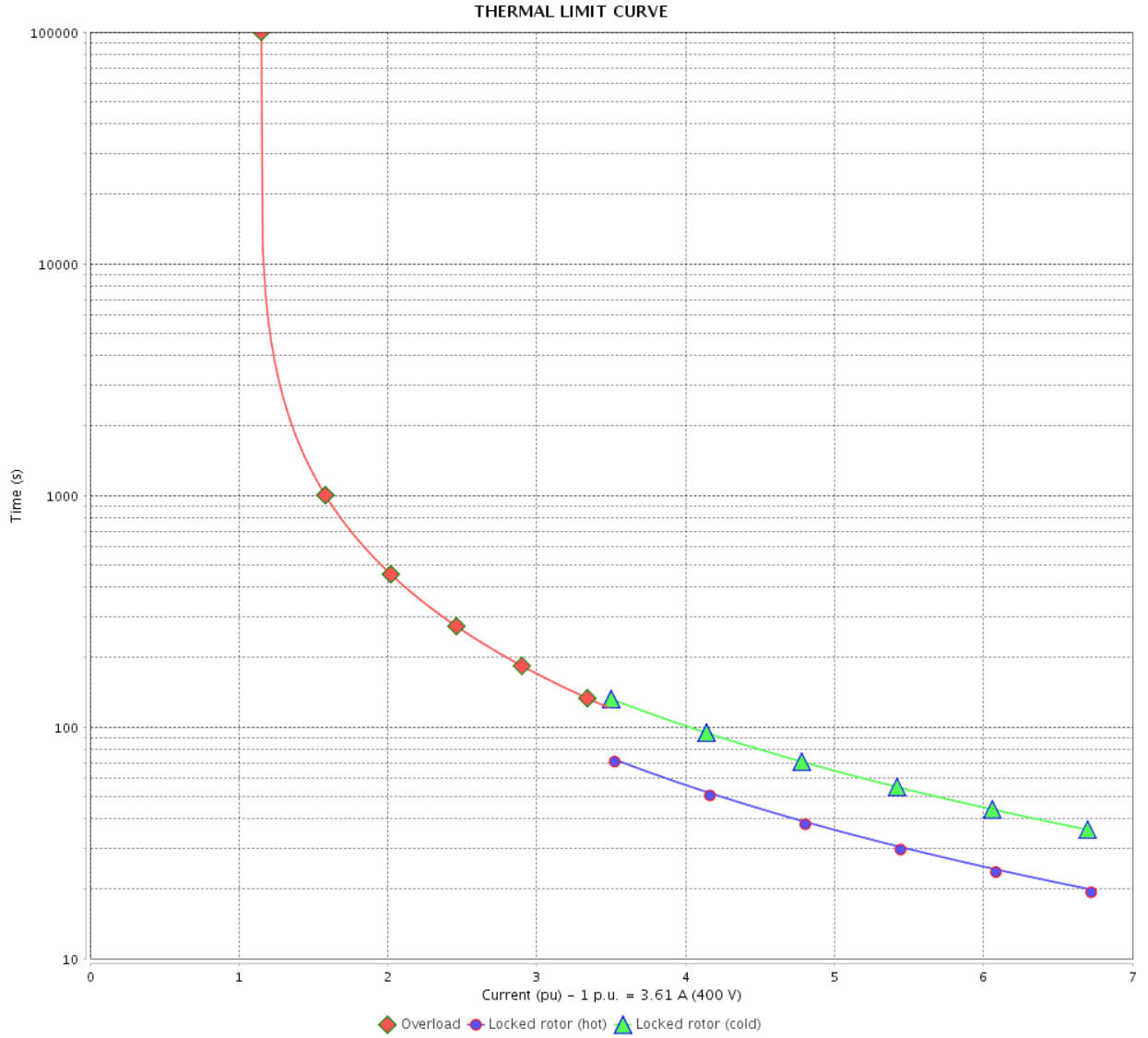
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase
Product code : 12189641
Catalog # : 00212ET3E184TC-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

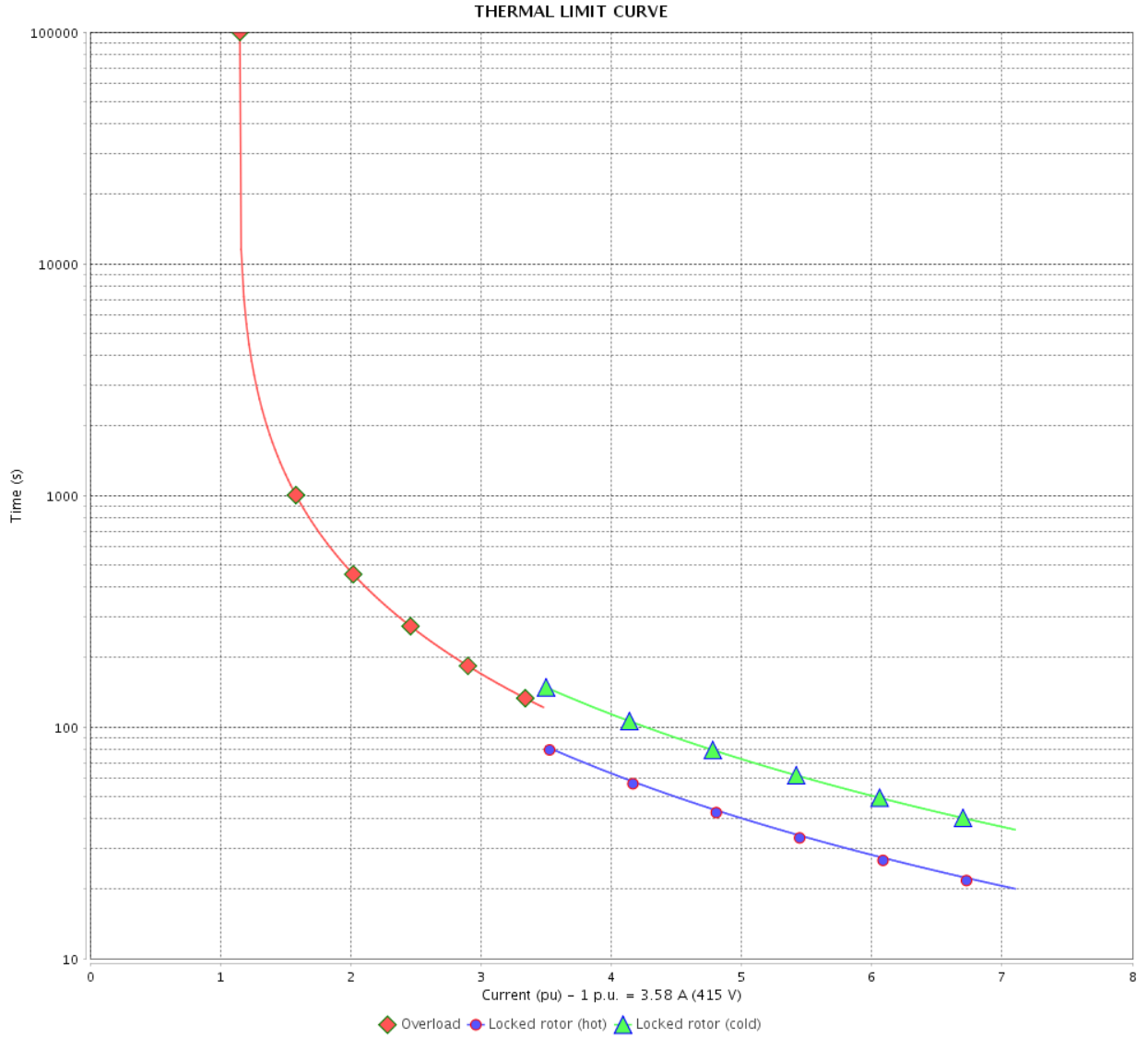
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



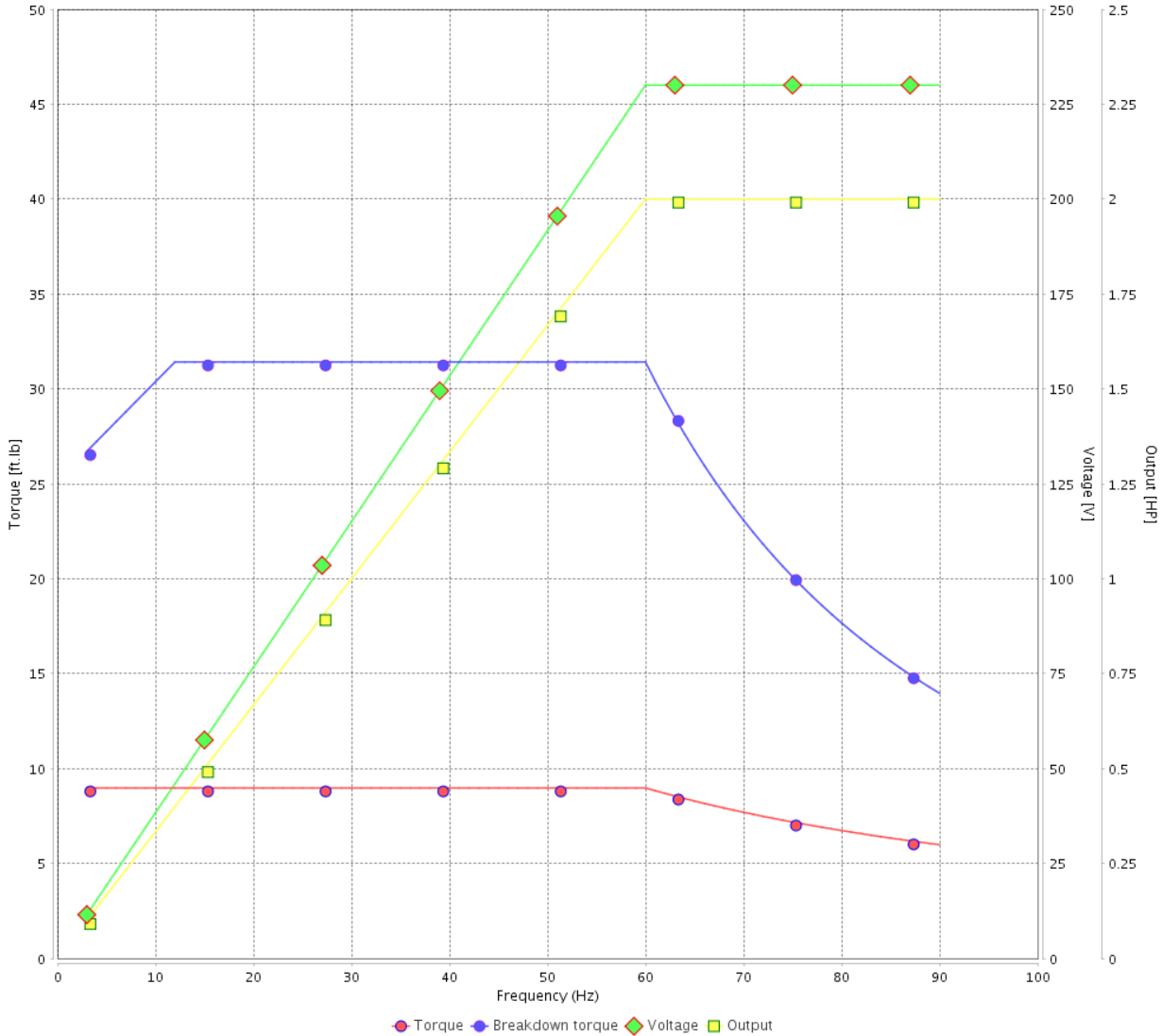
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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

Rev.	Changes Summary	Performed	Checked	Date
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

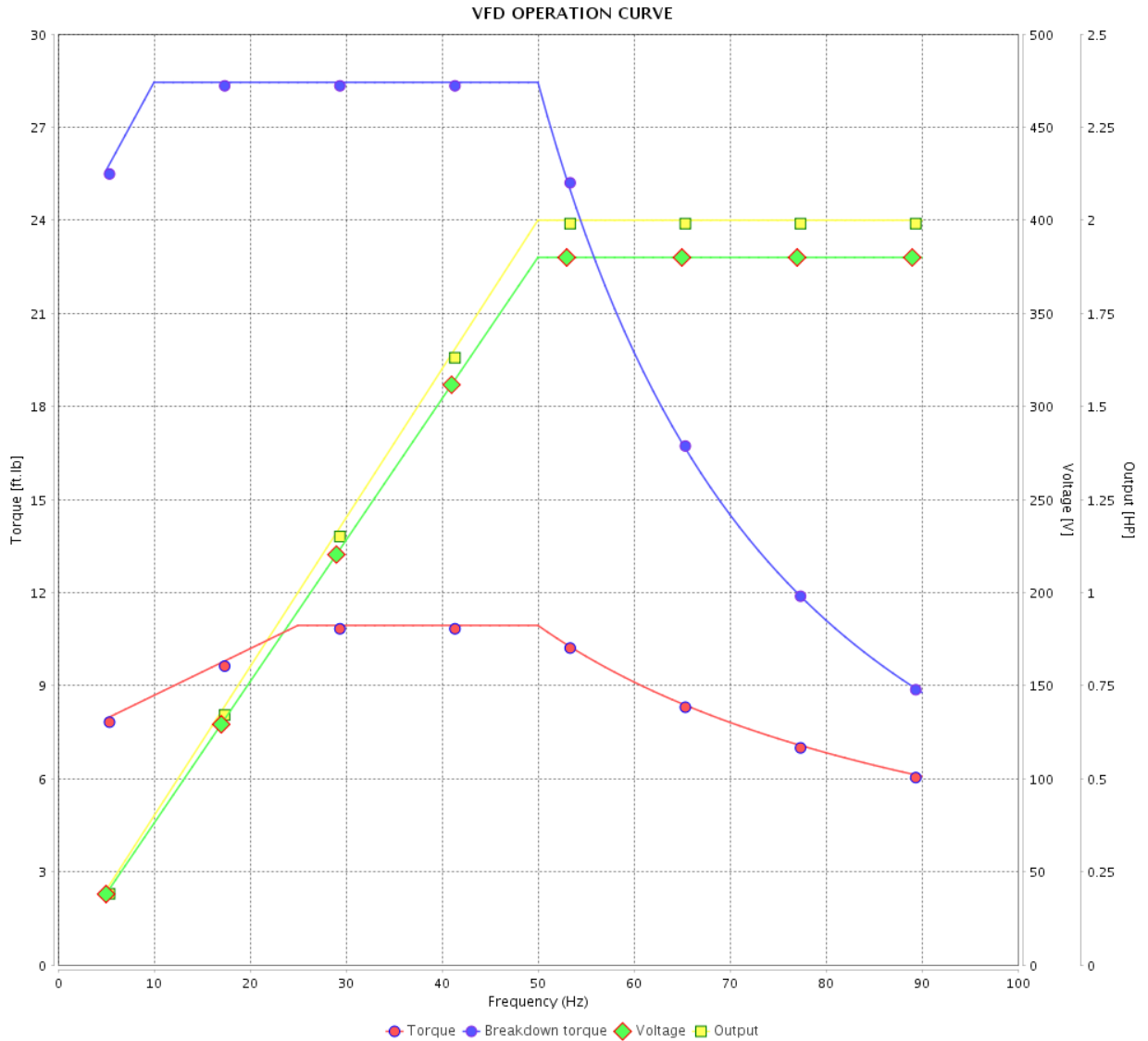


Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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



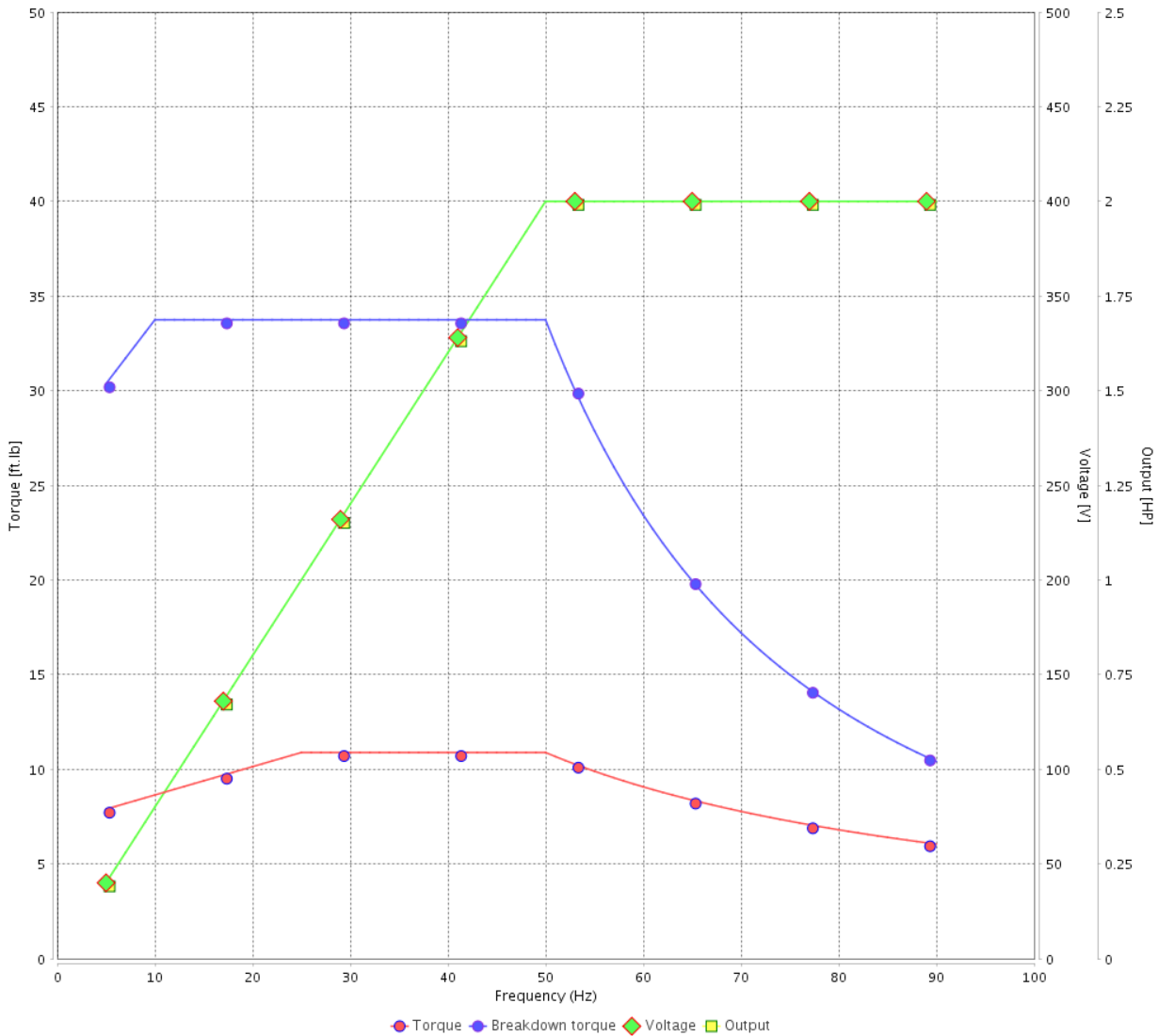
Customer : _____

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12189641

Catalog # : 00212ET3E184TC-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

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

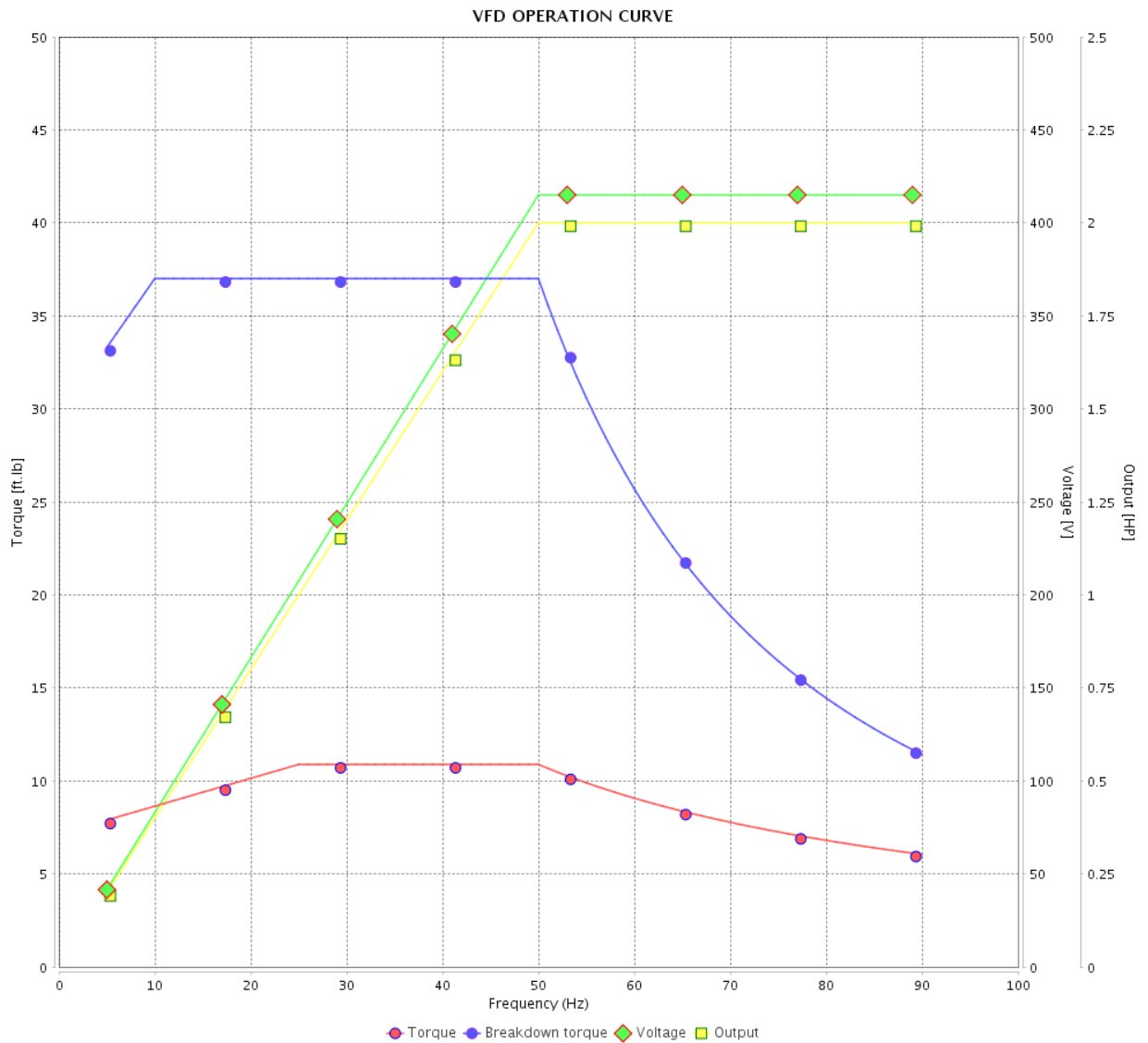


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Performance : 415 V 50 Hz 6P IE4

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

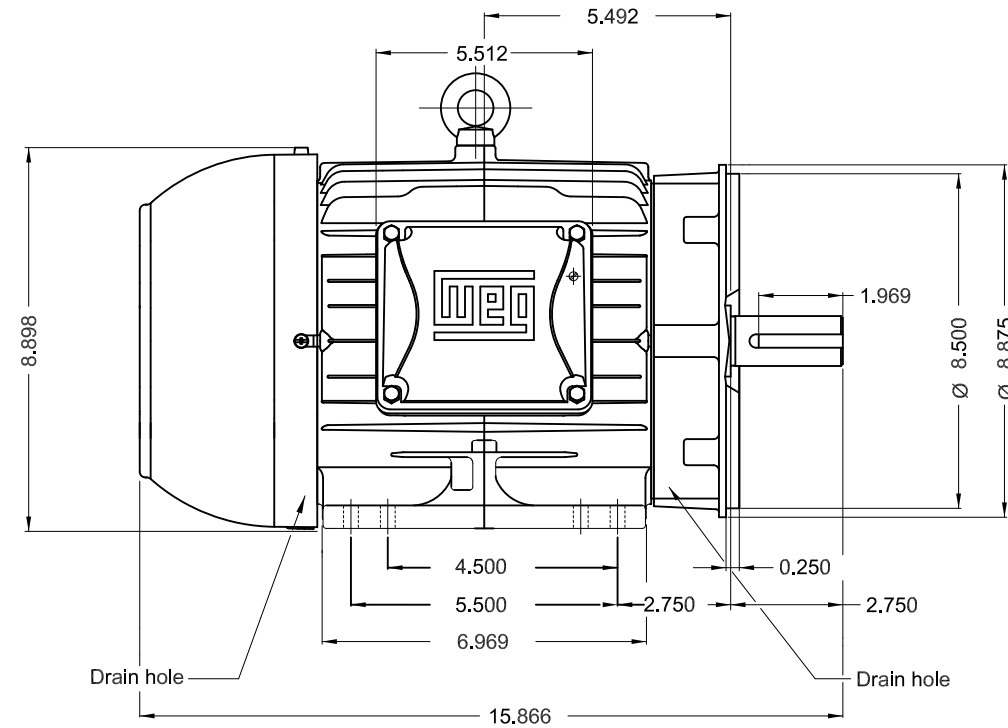
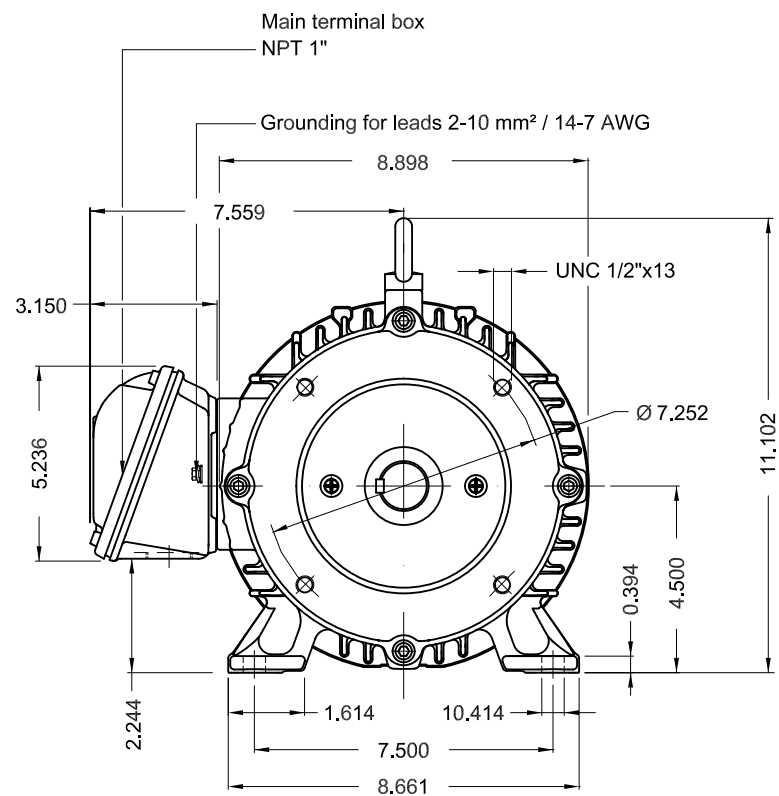
Rev.	Changes Summary	Performed	Checked	Date
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1 2 3 4 5 6

A

B

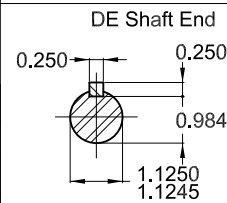
C



D

E

Bearing cap
Color RAL 5009
Painting plan 207A
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 W22 PREM. EFF.					
CHECKED		FRAME 182/4TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

PREVIEW
WDD



MADE IN MEXICO
12189641



W22

MODEL 00212ET3E184TC-W22

Inverter Duty Motor
Severe Duty



For use on 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,
VT 1000:1, CT 20:1, 1.00SF - T4A



FOR SAFE AREA
Mod. TE1BFOXON
CC029A

PH3 60Hz Fr. 182/4TC 1000m.a.s.l. IP55 TEFC 102lb

V 230/460

A 6.44/3.22

HP 2.0

kW 1.5

SF 1.25

SFA 8.05/4.03

RPM 1170

PF 0.66

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 88.5%

DUTY CONT.

DES B Code L

USABLE @208V 7.13A SF 1.15 SFA 8.20

2.0HP 1.5kW 50Hz 380V 3.66A 960RPM SF 1.00 EFF 86.5% (IE4)

