

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	11576328		
		Catalog # :	10036ET3E405JM-W22		
Frame	: 404/5TCZ	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	: 1113 lb		
Protection degree	: IP55	Moment of inertia (J)	: 13.2 sq.ft.lb		
Design	: B				
Output [HP]	100	75	75	75	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	224/112	99.6	94.6	92.2	
L. R. Amperes [A]	1456/728	677	719	756	
LRC [A]	6.5x(Code G)	6.8x(Code G)	7.6x(Code H)	8.2x(Code J)	
No load current [A]	52.0/26.0	25.7	27.5	29.1	
Rated speed [RPM]	3545	2955	2960	2965	
Slip [%]	1.53	1.50	1.33	1.17	
Rated torque [ft.lb]	148	133	133	133	
Locked rotor torque [%]	240	250	280	300	
Breakdown torque [%]	260	280	310	330	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	
Efficiency (%)	25%	92.8	92.4	92.5	93.1
	50%	93.0	93.0	93.1	93.5
	75%	94.1	93.8	93.8	94.0
	100%	94.1	94.3	94.3	94.3
Power Factor	25%	0.61	0.59	0.55	0.53
	50%	0.83	0.82	0.80	0.78
	75%	0.88	0.88	0.86	0.85
	100%	0.89	0.89	0.89	0.88
Bearing type	: <u>Drive end</u> 6314 C3 <u>Non drive end</u> 6314 C3	Foundation loads			
Sealing	: Oil Seal Oil Seal	Max. traction	: 759 lb		
Lubrication interval	: 4000 h 4000 h	Max. compression	: 1872 lb		
Lubricant amount	: 27 g 27 g				
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 243A SF 1.10 SFA 268A					
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



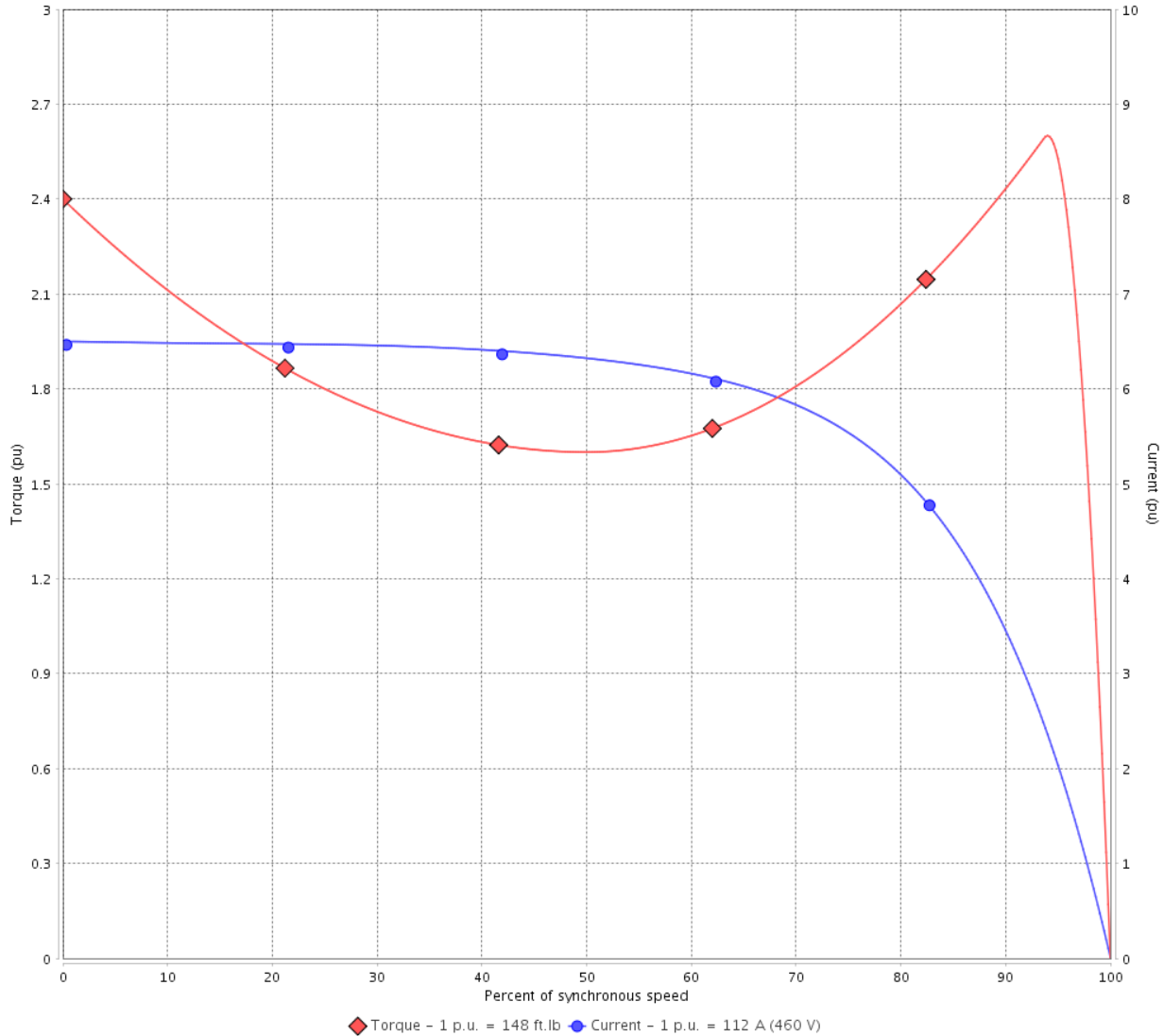
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11576328

Catalog # : 10036ET3E405JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 224/112 A	Moment of inertia (J)	: 13.2 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 148 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 3545 rpm	Design	: B

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

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TORQUE AND CURRENT VS SPEED CURVE



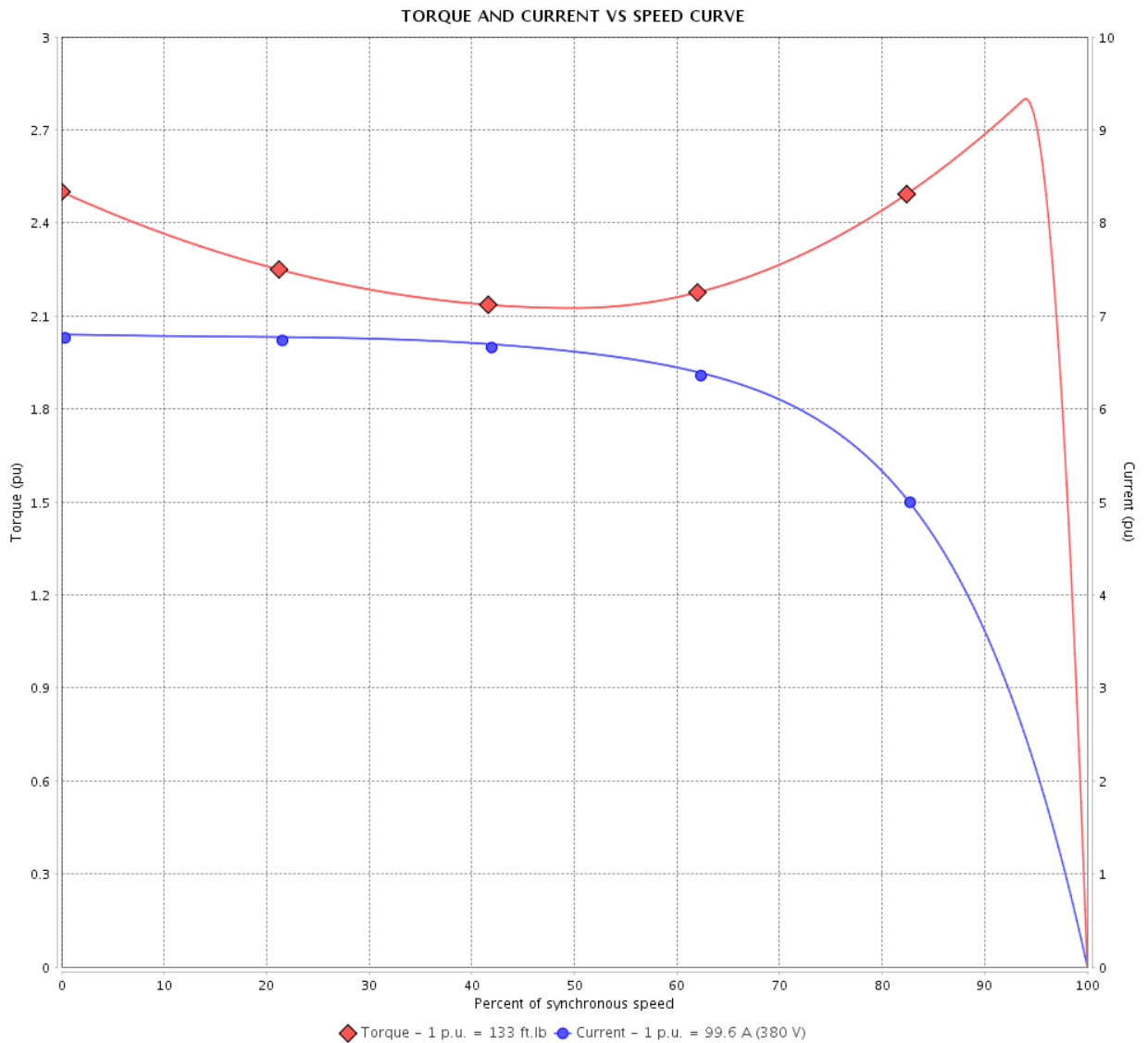
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11576328

Catalog # : 10036ET3E405JM-W22



Performance : 380 V 50 Hz 2P IE3

Rated current	: 99.6 A	Moment of inertia (J)	: 13.2 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 133 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



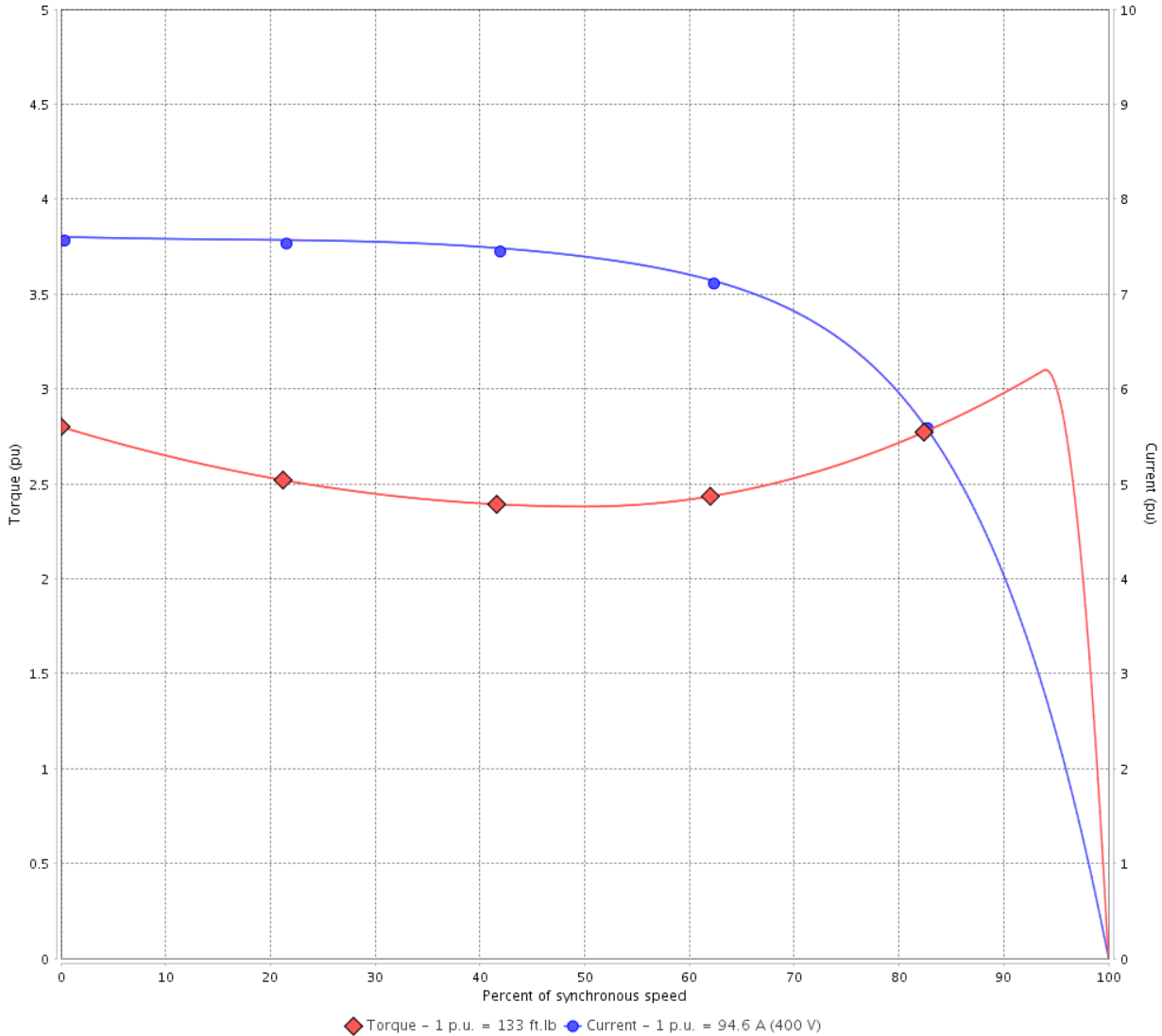
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11576328

Catalog # : 10036ET3E405JM-W22

TORQUE AND CURRENT VS SPEED CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current	: 94.6 A	Moment of inertia (J)	: 13.2 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 133 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2960 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



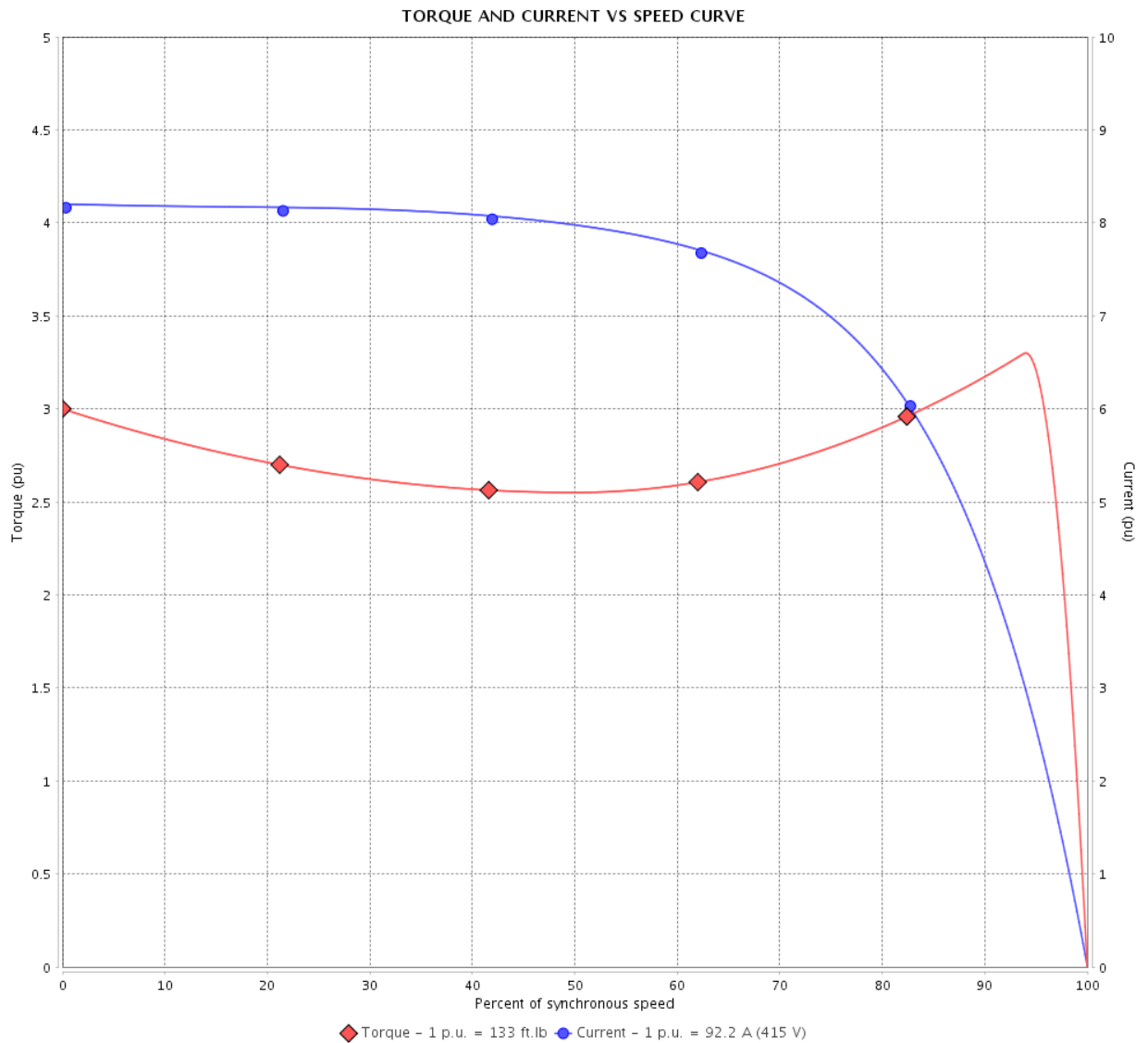
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 11576328

Catalog # : 10036ET3E405JM-W22



Performance : 415 V 50 Hz 2P IE3

Rated current	: 92.2 A	Moment of inertia (J)	: 13.2 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 133 ft.lb	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 2965 rpm	Design	: B

Locked rotor time : 18s (cold) 10s (hot)

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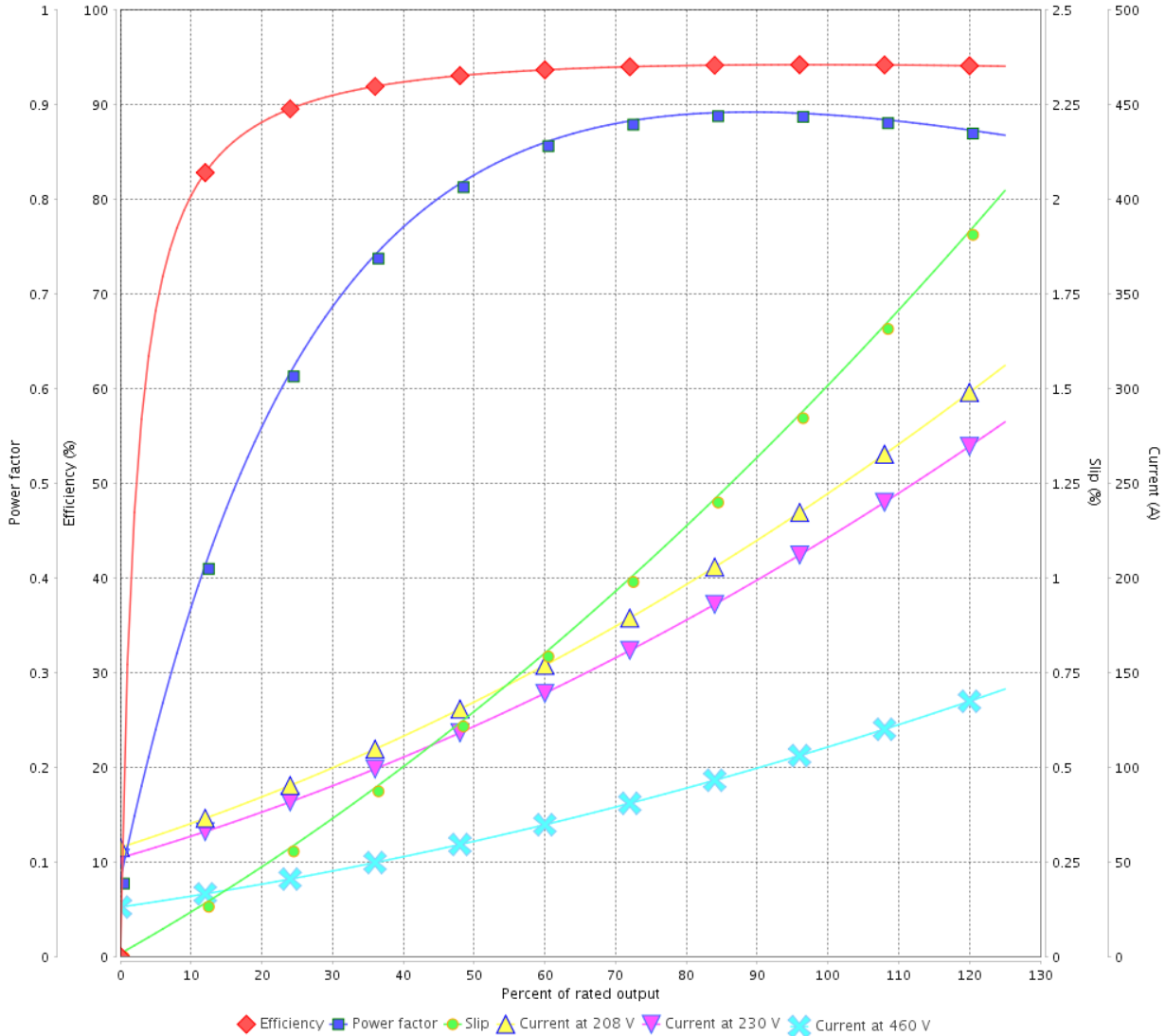
Customer :

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Product code : 11576328

Catalog # : 10036ET3E405JM-W22

LOAD PERFORMANCE CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 224/112 A
 LRC : 6.5
 Rated torque : 148 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 3545 rpm

Moment of inertia (J) : 13.2 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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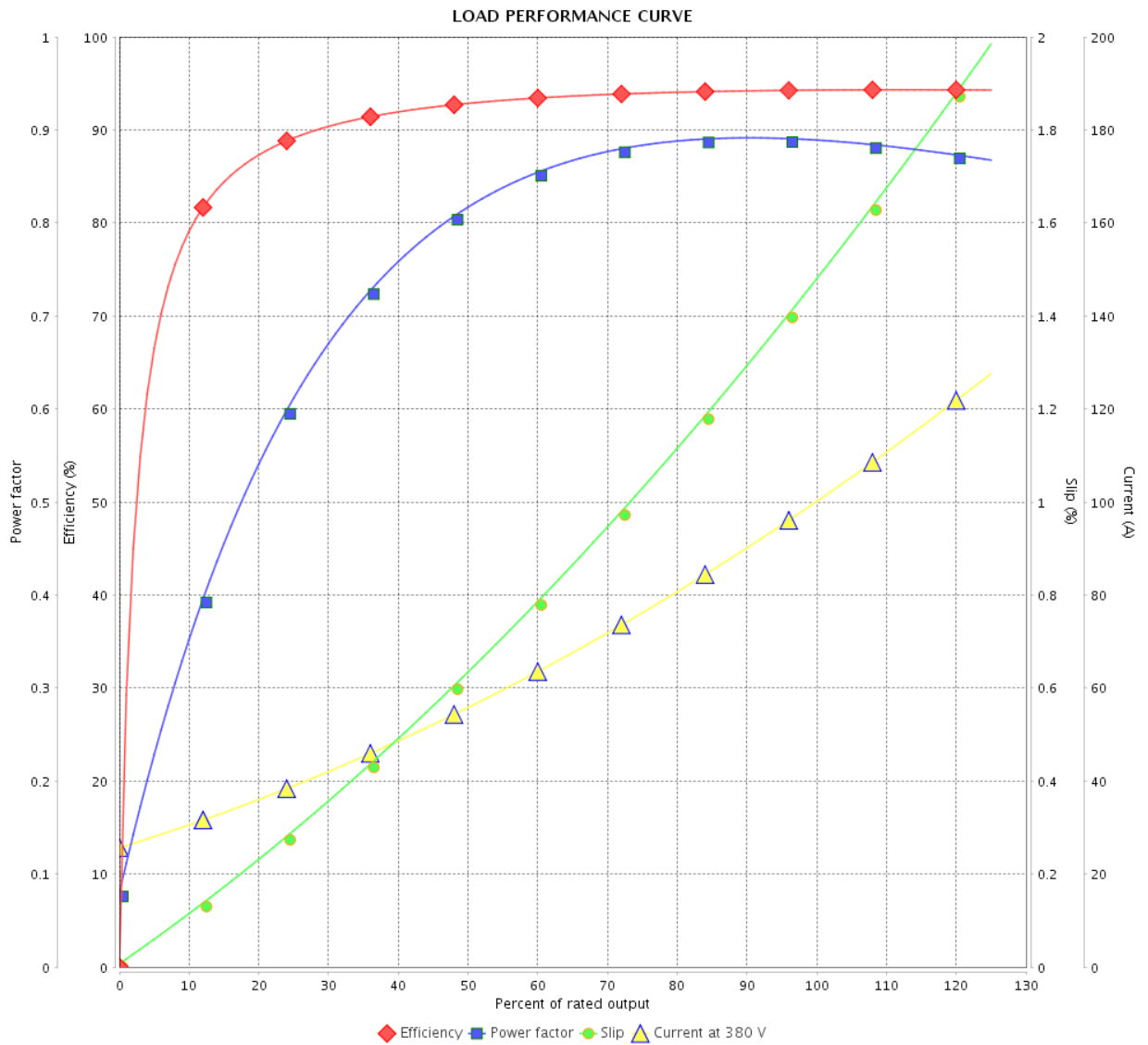


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Performance : 380 V 50 Hz 2P IE3

Rated current : 99.6 A
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 Locked rotor torque : 250 %
 Breakdown torque : 280 %
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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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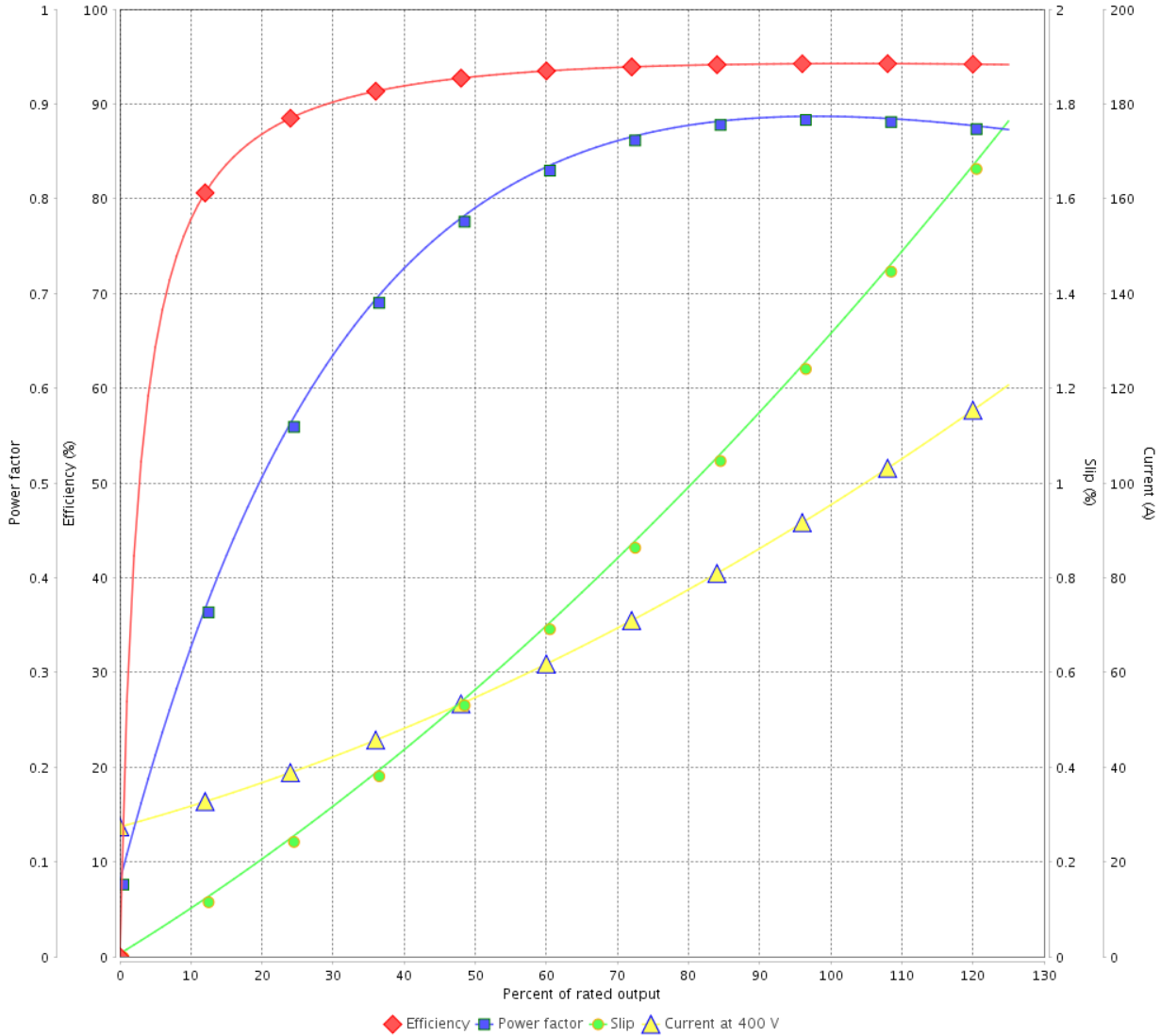
Customer : _____

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LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 2P IE3

Rated current : 94.6 A
 LRC : 7.6
 Rated torque : 133 ft.lb
 Locked rotor torque : 280 %
 Breakdown torque : 310 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 13.2 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

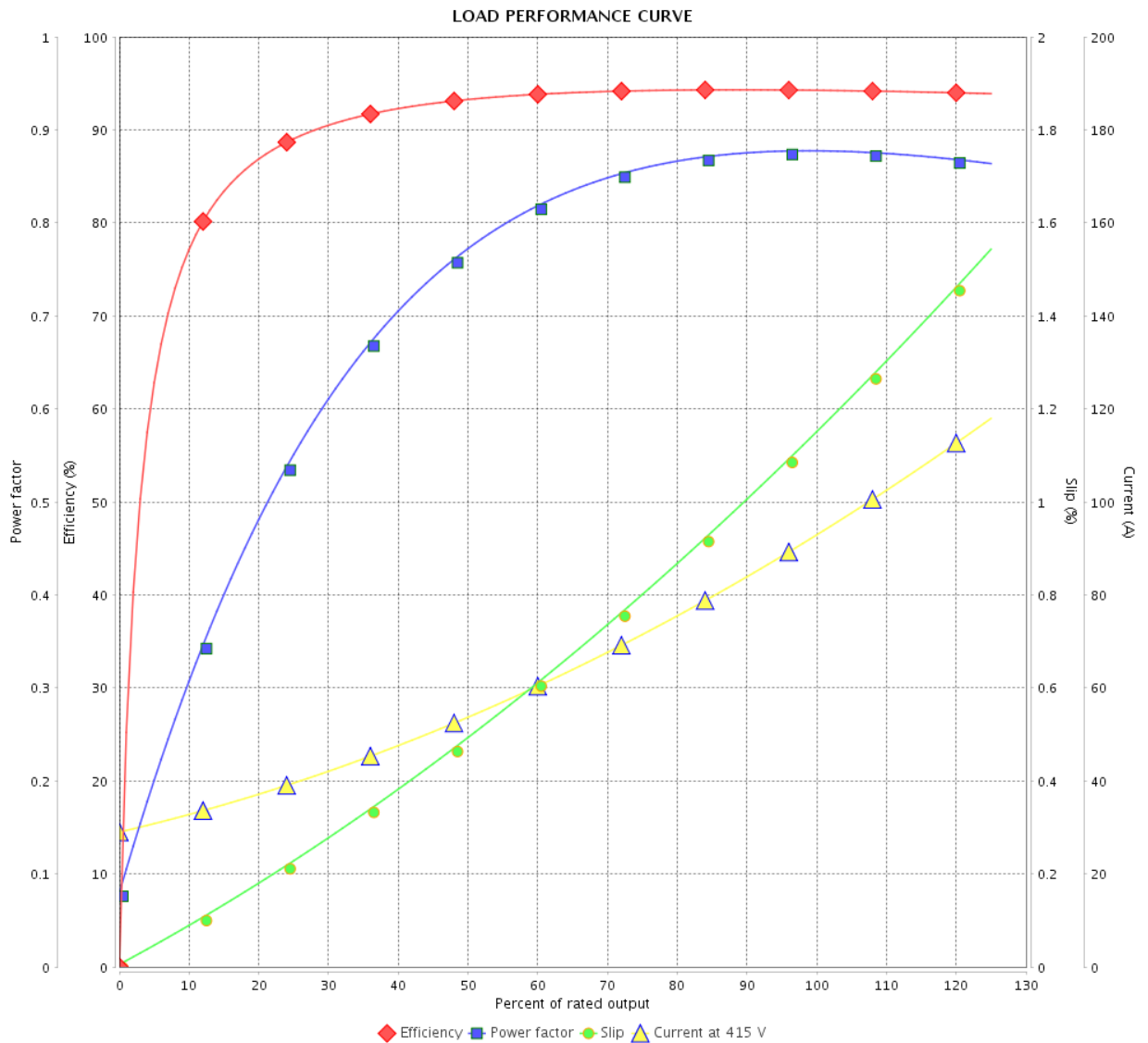


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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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THERMAL LIMIT CURVE



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Rated torque : 148 ft.lb	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.25
Breakdown torque : 260 %	Temperature rise : 80 K
Rated speed : 3545 rpm	Design : B

Heating constant

Cooling constant

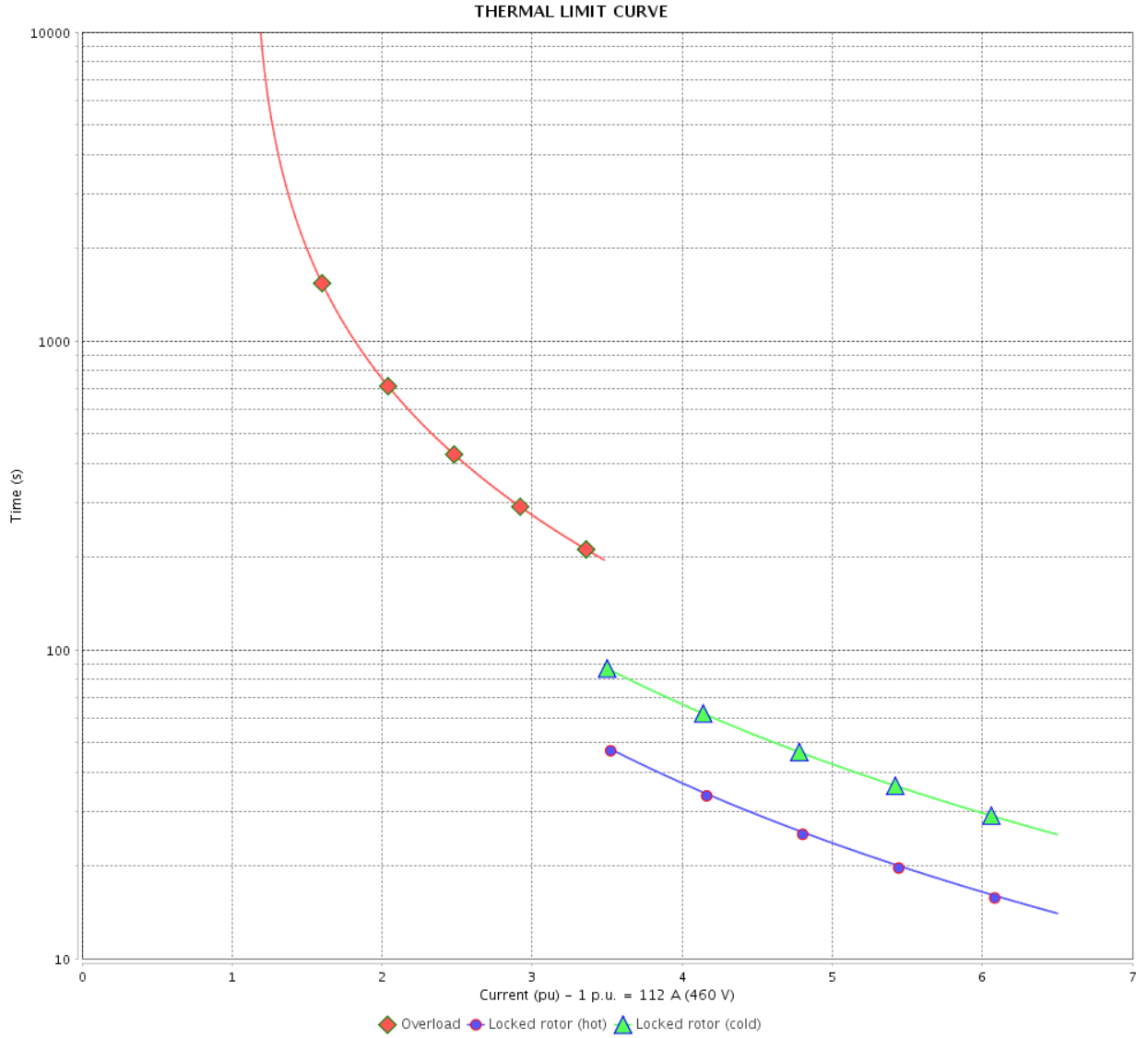
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LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 133 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: B

Heating constant

Cooling constant

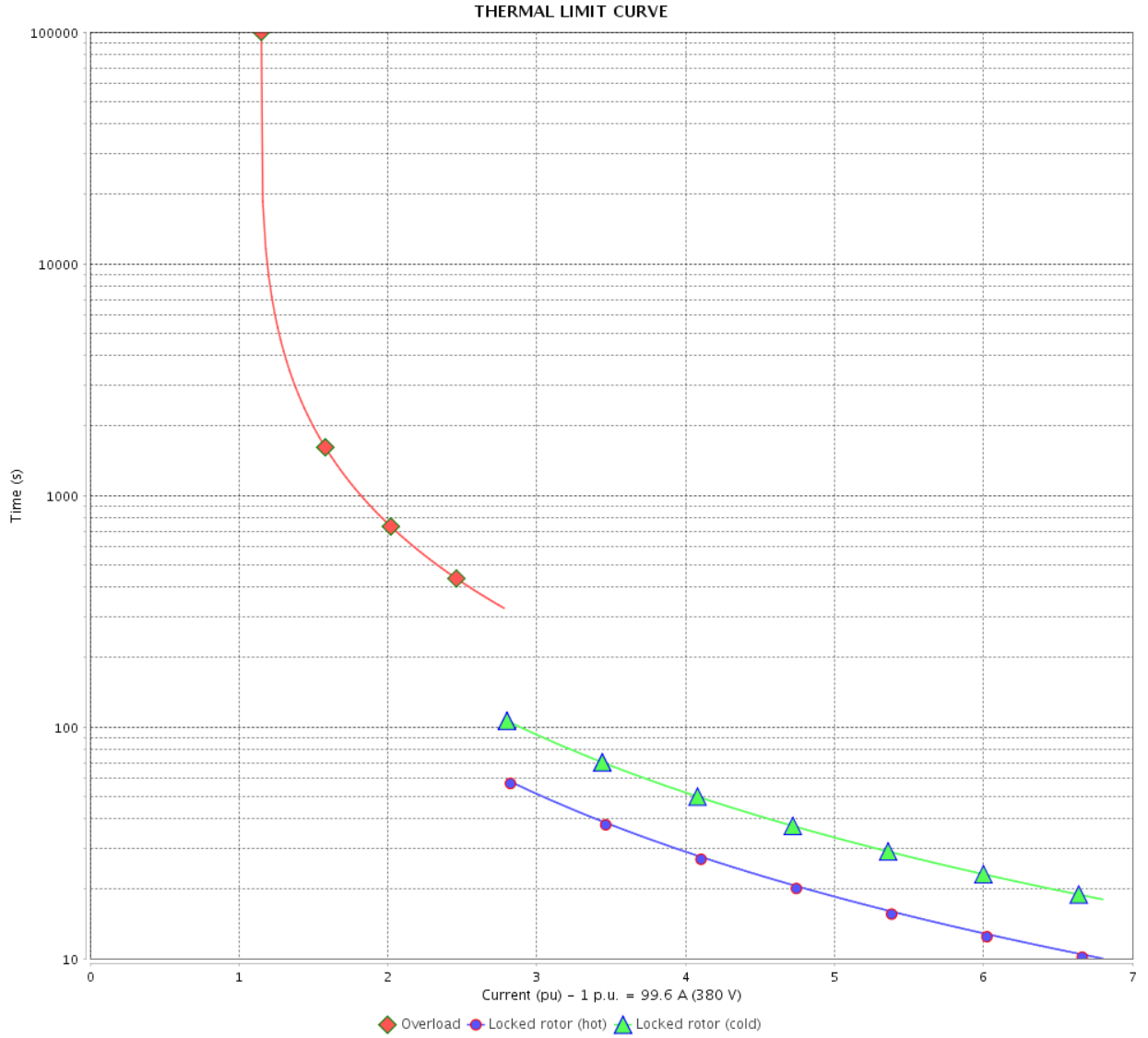
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Rated torque	: 133 ft.lb	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
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Rated speed	: 2960 rpm	Design	: B

Heating constant

Cooling constant

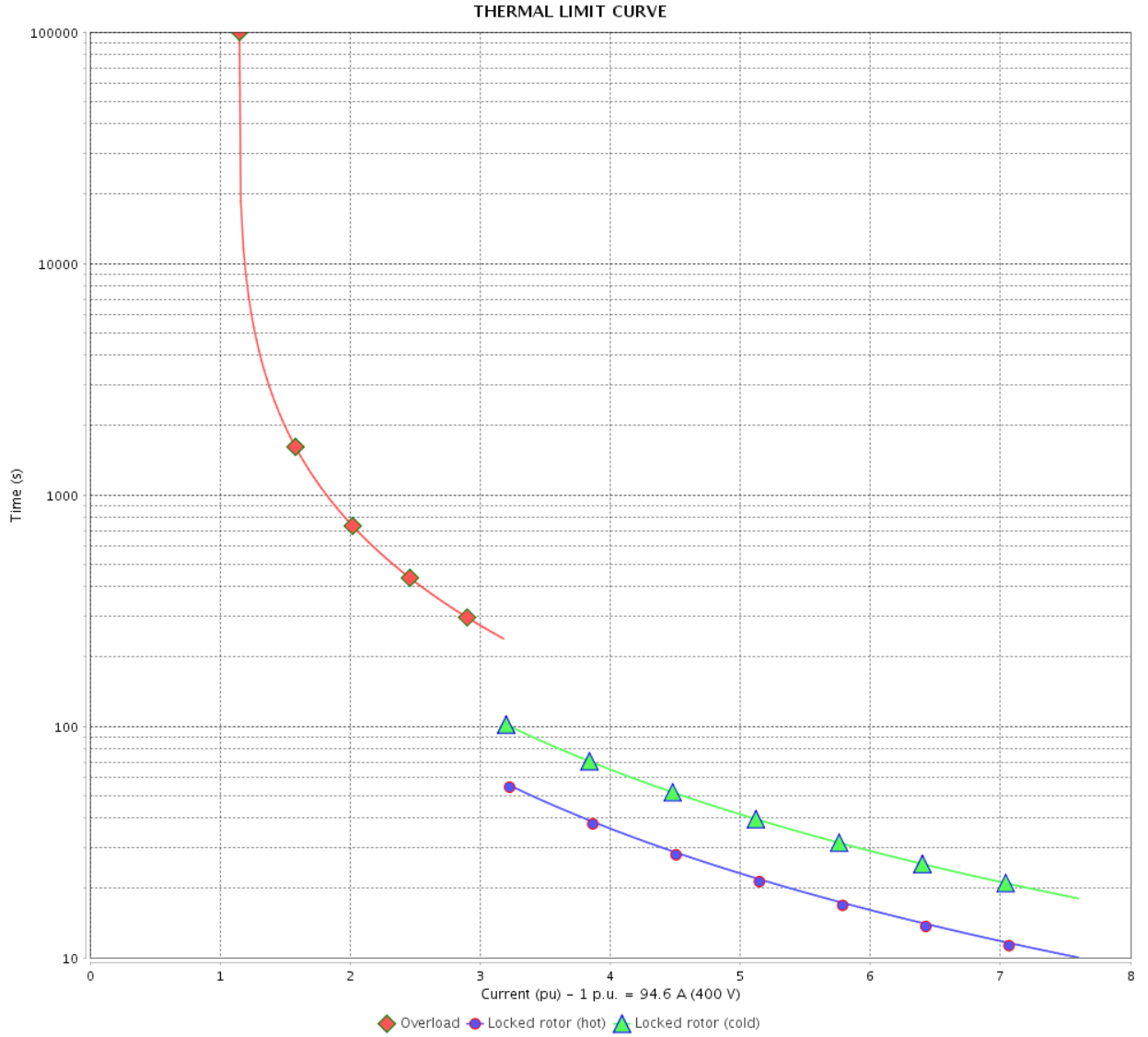
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THERMAL LIMIT CURVE



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Performance : 415 V 50 Hz 2P IE3

Rated current : 92.2 A	Moment of inertia (J) : 13.2 sq.ft.lb
LRC : 8.2	Duty cycle : Cont.(S1)
Rated torque : 133 ft.lb	Insulation class : F
Locked rotor torque : 300 %	Service factor : 1.00
Breakdown torque : 330 %	Temperature rise : 80 K
Rated speed : 2965 rpm	Design : B

Heating constant

Cooling constant

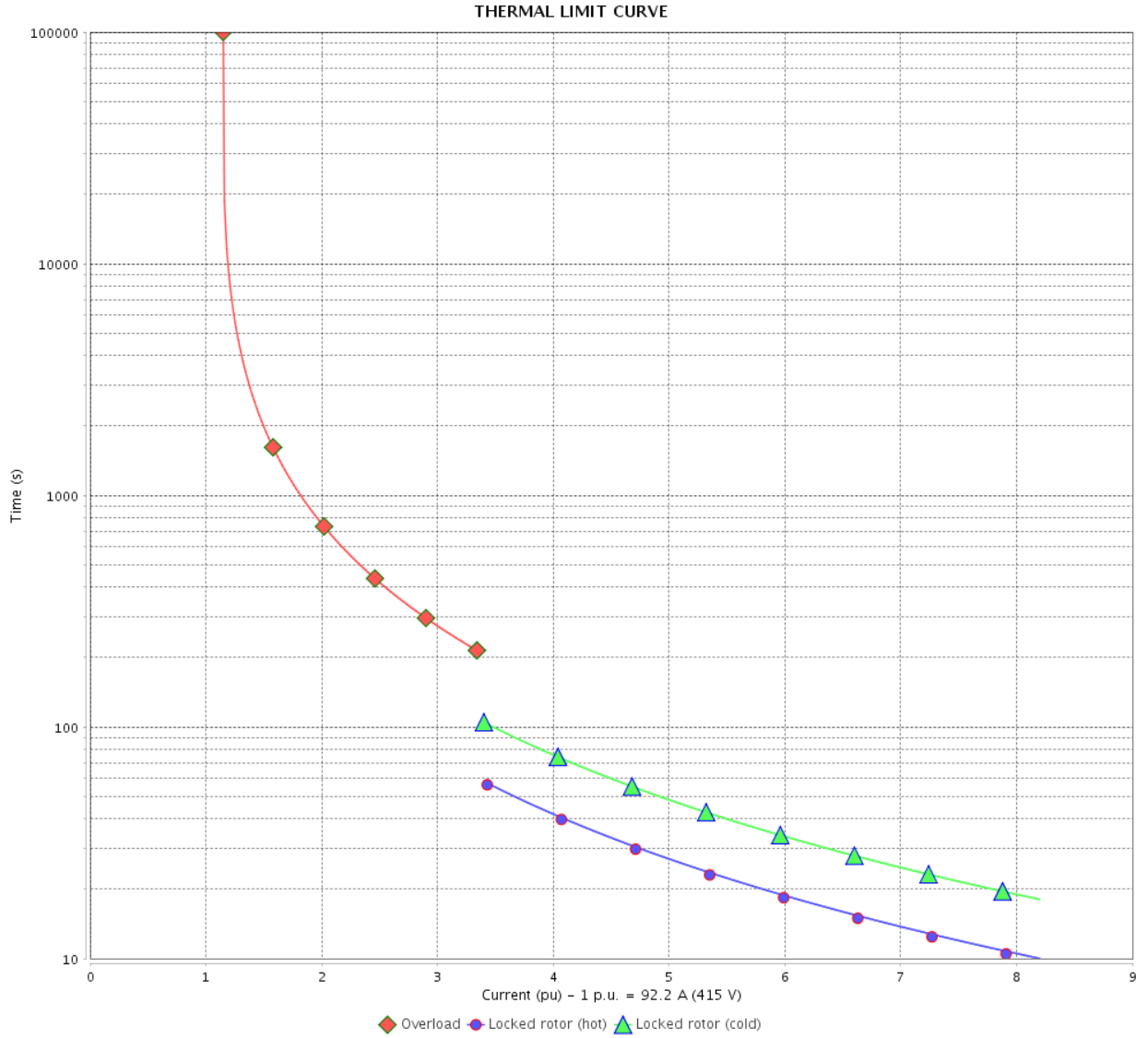
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



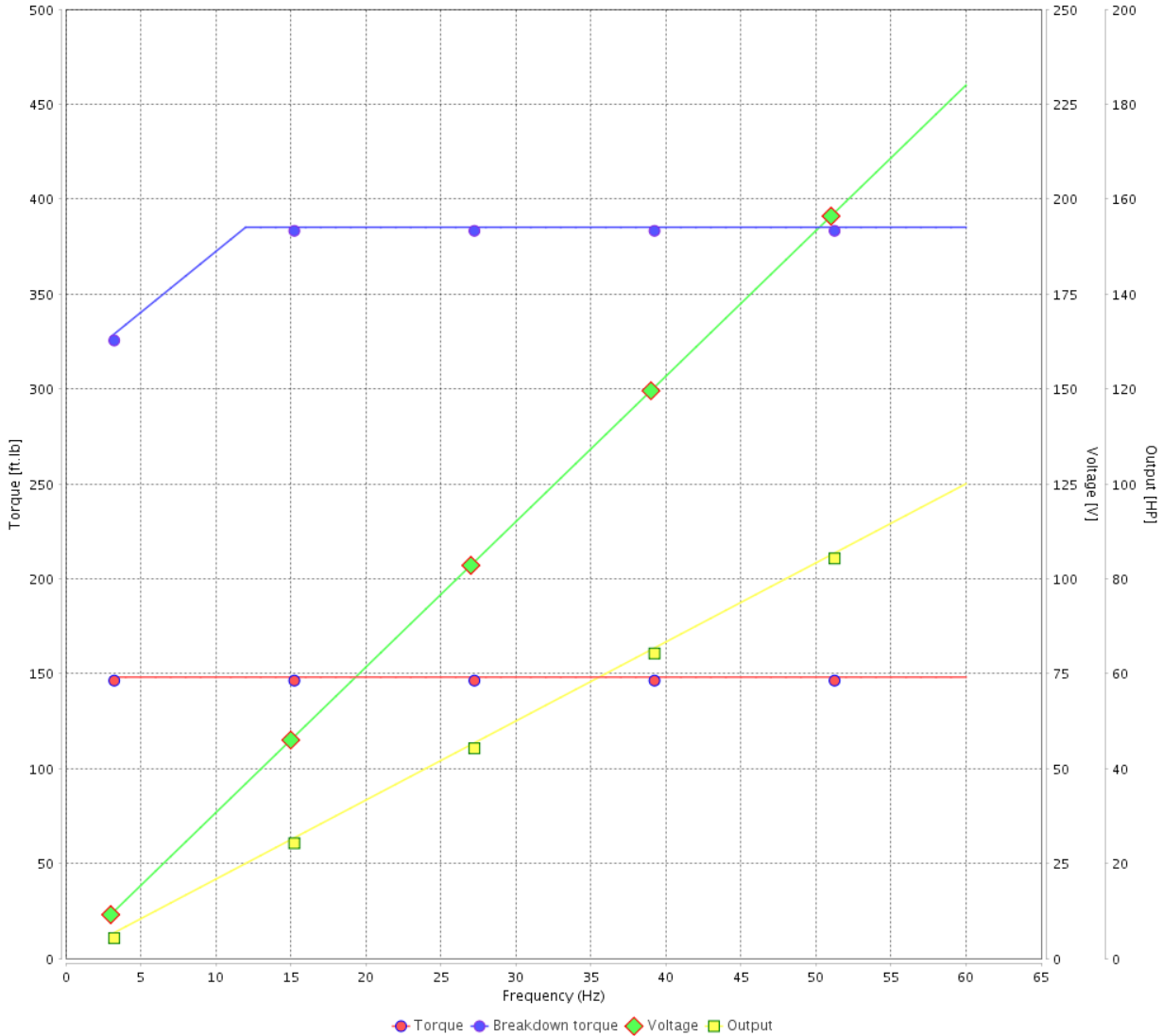
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Product code : 11576328

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VFD OPERATION CURVE



Performance : 230/460 V 60 Hz 2P

Rated current : 224/112 A
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 Rated torque : 148 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 3545 rpm

Moment of inertia (J) : 13.2 sq.ft.lb
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 Insulation class : F
 Service factor : 1.25
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

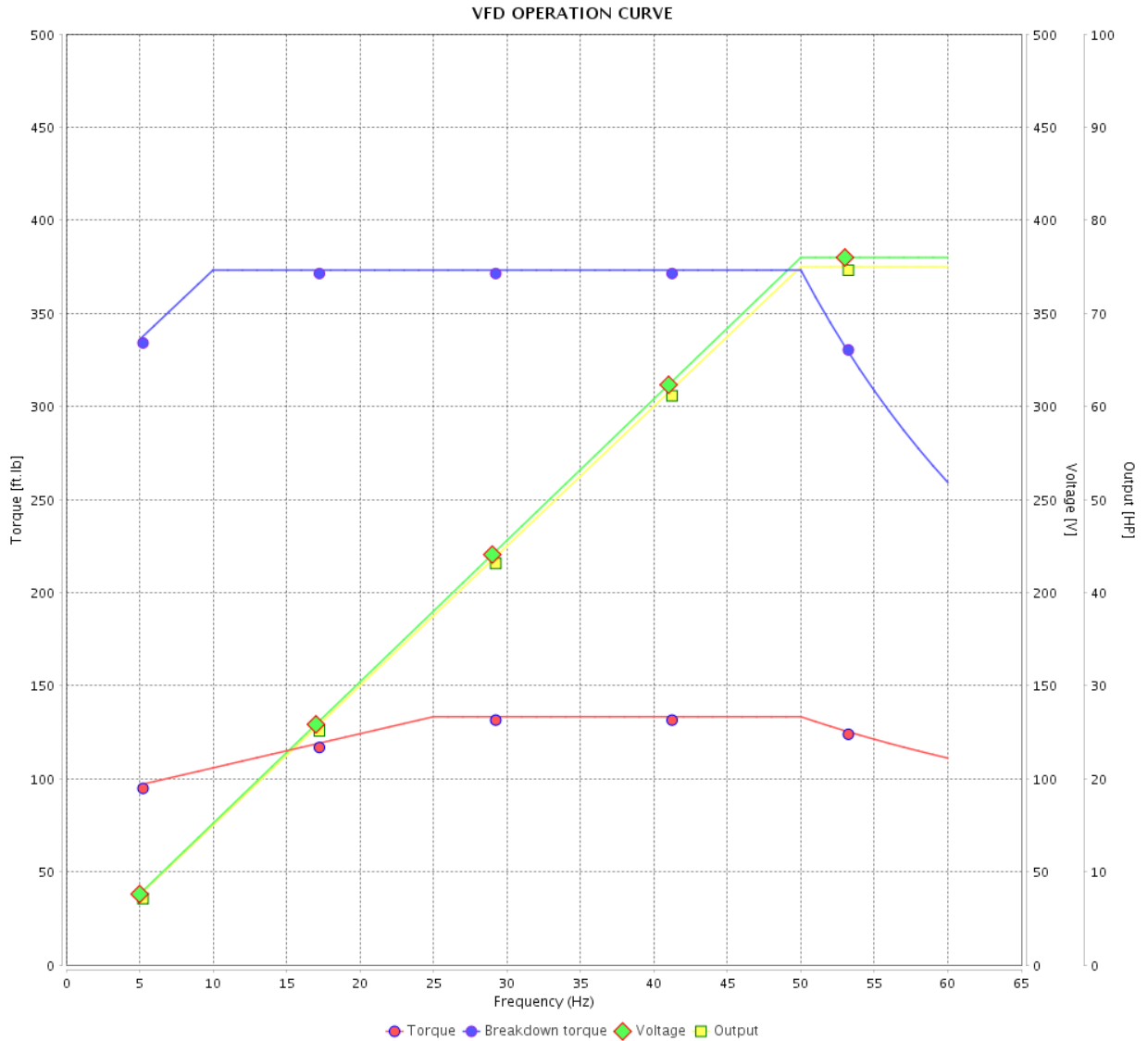


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Performance : 380 V 50 Hz 2P IE3

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 Breakdown torque : 280 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 13.2 sq.ft.lb
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 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



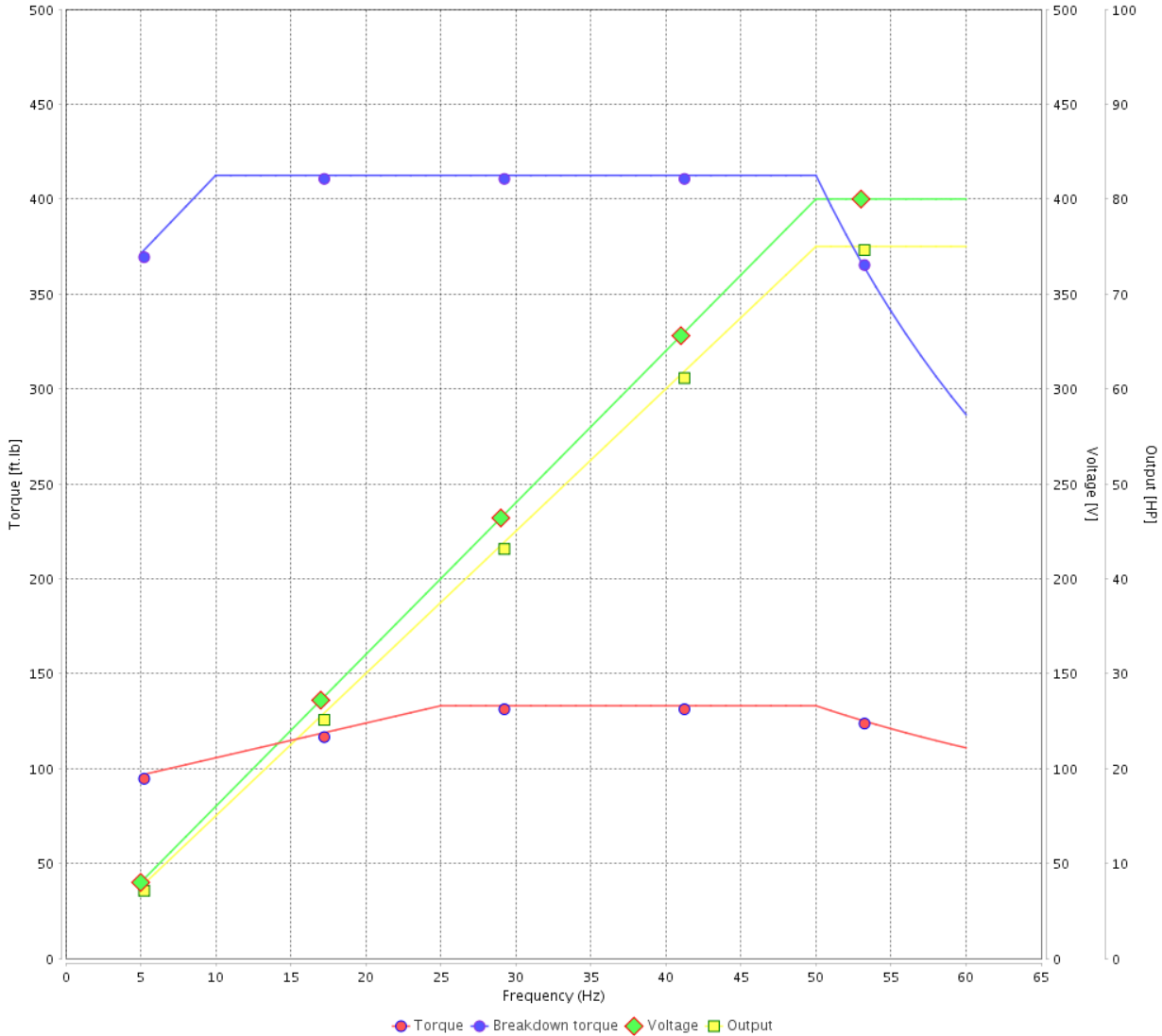
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VFD OPERATION CURVE



Performance : 400 V 50 Hz 2P IE3

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Moment of inertia (J) : 13.2 sq.ft.lb
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 Insulation class : F
 Service factor : 1.00
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

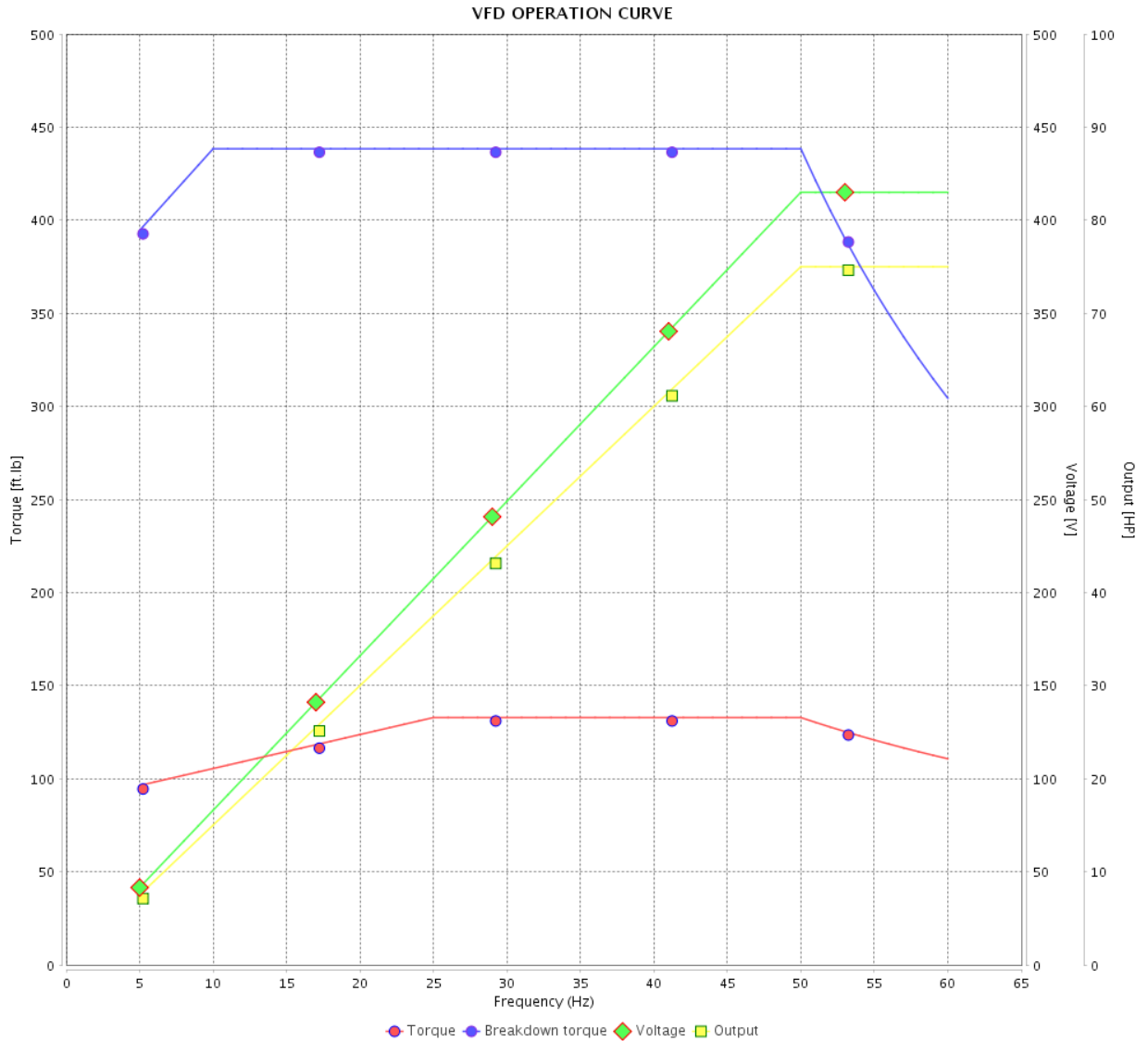


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 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 2965 rpm

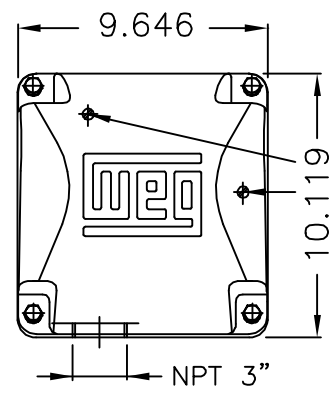
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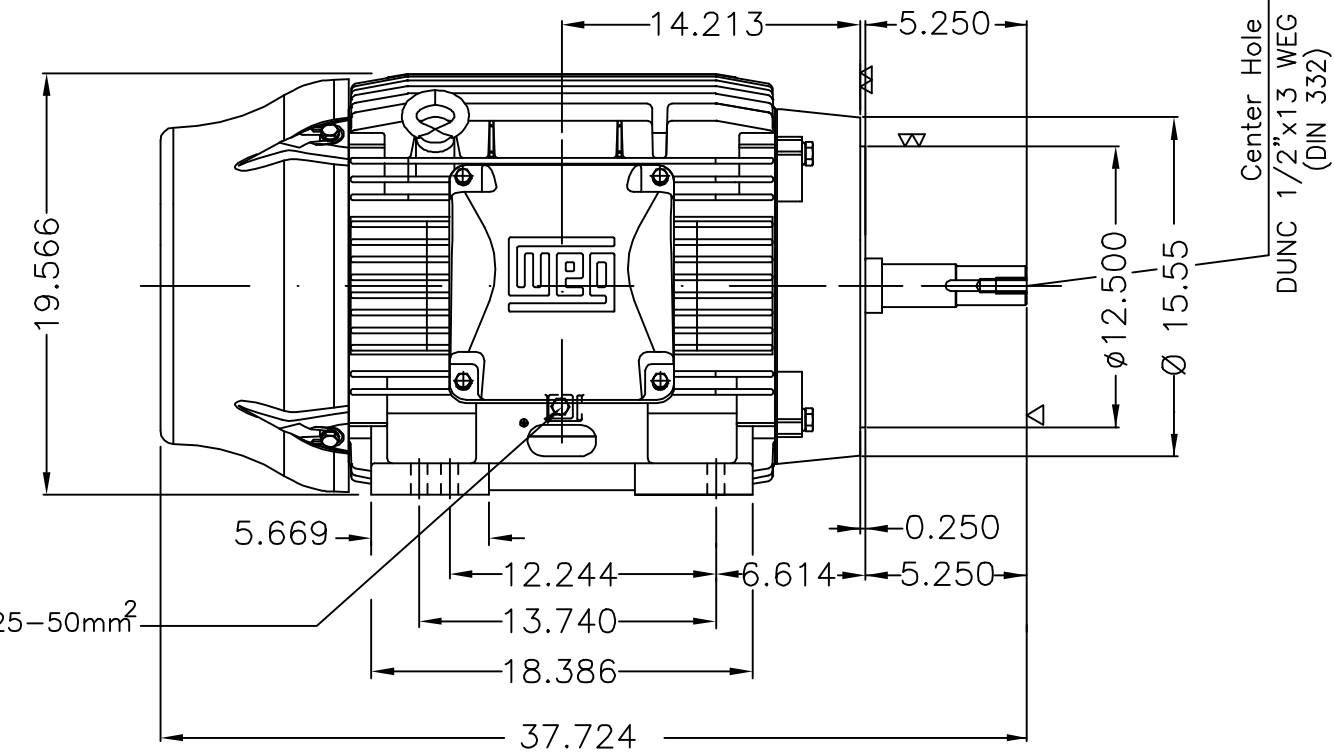
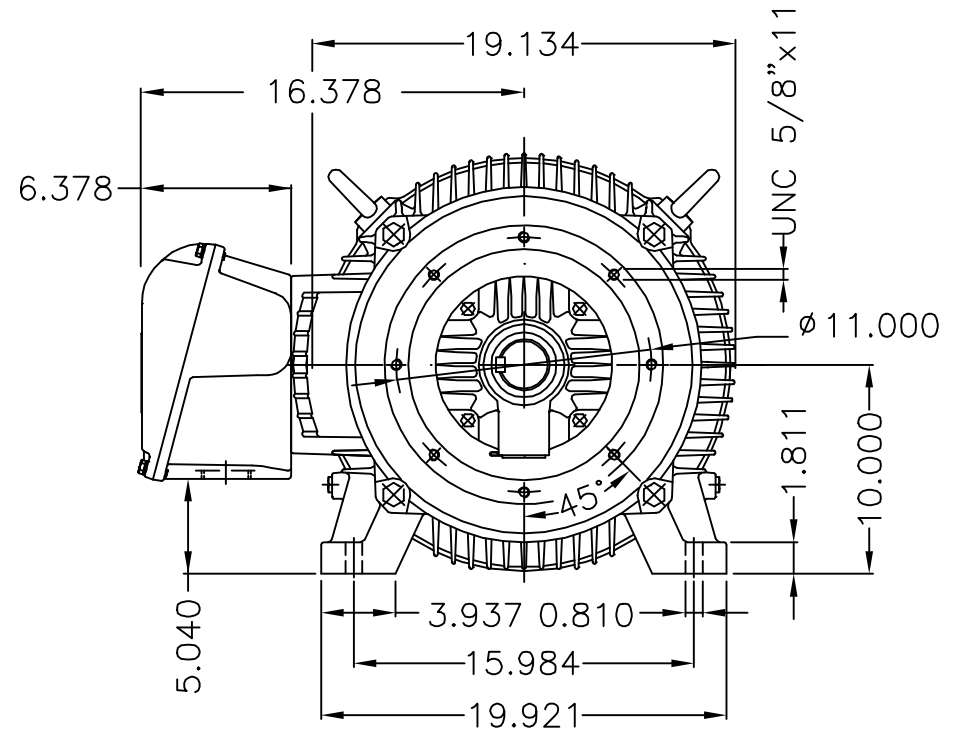
EIXO		Dimensões em polegadas Dimensions in inches
PADRÃO		
OPCIONAL		
ESPECIAL	X	

THIS IS AN UPDATED REVISION, THE PREVIOUS ONE MUST BE DISREGARDED.

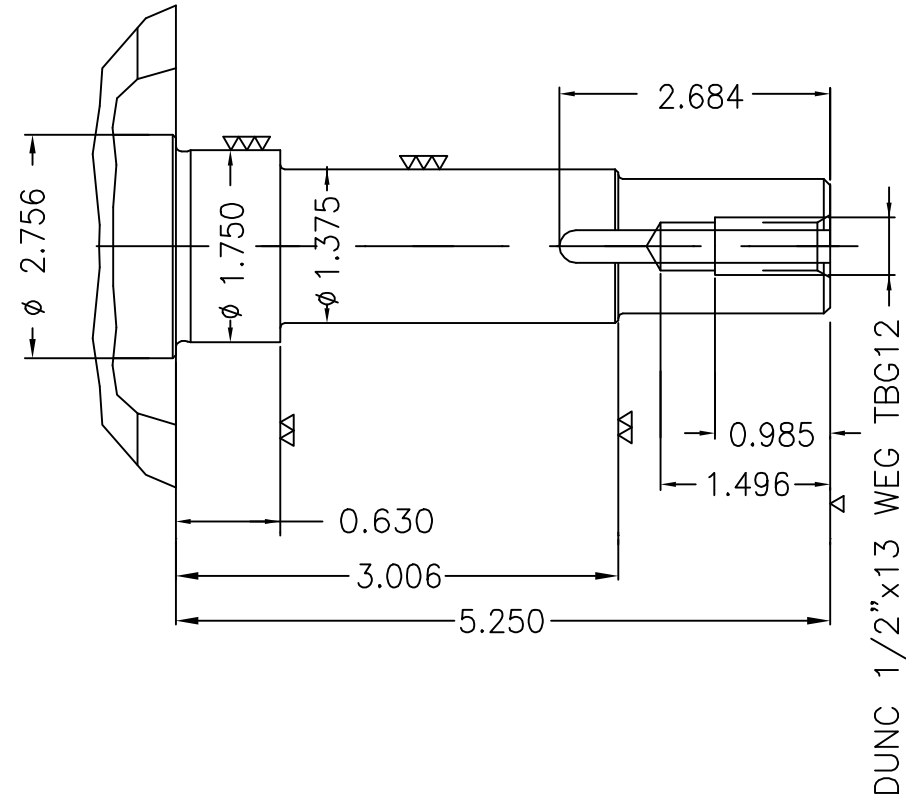


Main terminal box

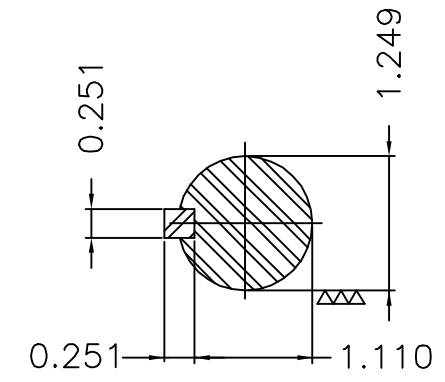
Grounding for leads 25-50mm²



Grounding for leads 25-50mm²



DUNC 1/2"x13 WEG TBG12



DE Shaft End

Material do eixo - AISI/SAE 4140 / Shaft material - AISI/SAE 4140
 Vedação - retentor com mola / Sealing - oil seal ring
 Plano de pintura 203A / Painting plan 203A
 Forma construtiva B34D / Mounting B34R(D)

WEG ELECTRIC CORPORATION

500000376844	ALT. CONF. CLAIM 406441050	SCARMAGNANI	ALCIDESZ	29.10.2010	01			
500000376837	DOCUMENTO NOVO	SCARMAGNANI	ALCIDESZ	25.10.2010	00			
MODIF. NUMBER	LOC	SUMMARY OF MODIFICATIONS		EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	SCARMAGNANI	THREE PHASE W22 MOTOR - NEMA PREMIUM EFF FRAME 404/5TCZ IP55	10001013731					
CHECKED			000	01				
RELEASED	ALCIDESZ							
REL. DATE	25.10.2010	WMO-JGS	JARAGUÁ DO SUL	ENG. MOTORES INDUSTRIAIS	FOL/SHEET	1 / 1		

100 HP 02 Poles 60Hz 406362331/0

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