

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: Premium Efficiency Three-Phase	Product code :	12812242
		Catalog # :	00236OT3E56CFL-S
Frame	: 56C	Cooling method	: IC01 - ODP
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	: 34.3 lb
Design	: A	Moment of inertia (J)	: 0.1151 sq.ft.lb
Output [HP]	2	2	2
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	4.84/2.42	5.88/2.94	5.26/2.79
L. R. Amperes [A]	43.1/21.5	40.6/20.3	40.0/21.2
LRC [A]	8.9x(Code K)	6.9x(Code H)	7.6x(Code J)
No load current [A]	1.83/0.917	1.81/0.906	1.84/0.978
Rated speed [RPM]	3510	2890	2900
Slip [%]	2.50	3.67	3.33
Rated torque [ft.lb]	2.99	3.63	3.62
Locked rotor torque [%]	220	180	200
Breakdown torque [%]	330	250	280
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)
Noise level ²	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)
Efficiency (%)	25%	83.7	85.4
	50%	84.0	84.7
	75%	85.5	85.4
	100%	85.5	84.3
Power Factor	25%	0.49	0.52
	50%	0.77	0.80
	75%	0.86	0.88
	100%	0.91	0.92
Bearing type	: Drive end 6204 ZZ Non drive end 6202 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 82 lb
		Max. compression	: 117 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes			
USABLE @208V 5.35A SF 1.00 SFA 5.35A			
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

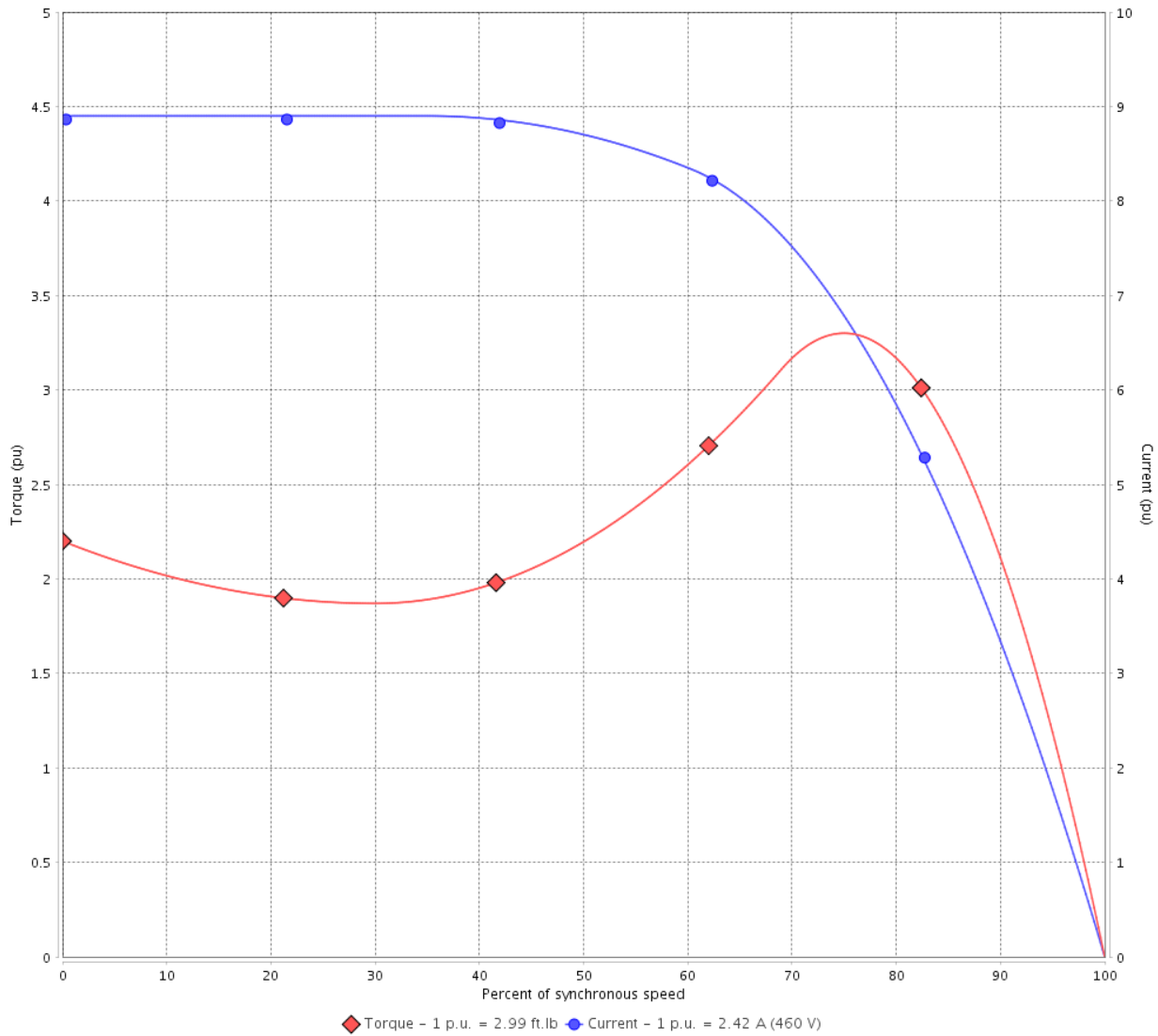
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12812242
 Catalog # : 002360T3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 4.84/2.42 A	Moment of inertia (J)	: 0.1151 sq.ft.lb
LRC	: 8.9	Duty cycle	: Cont.(S1)
Rated torque	: 2.99 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	:
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 3510 rpm	Design	: A

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

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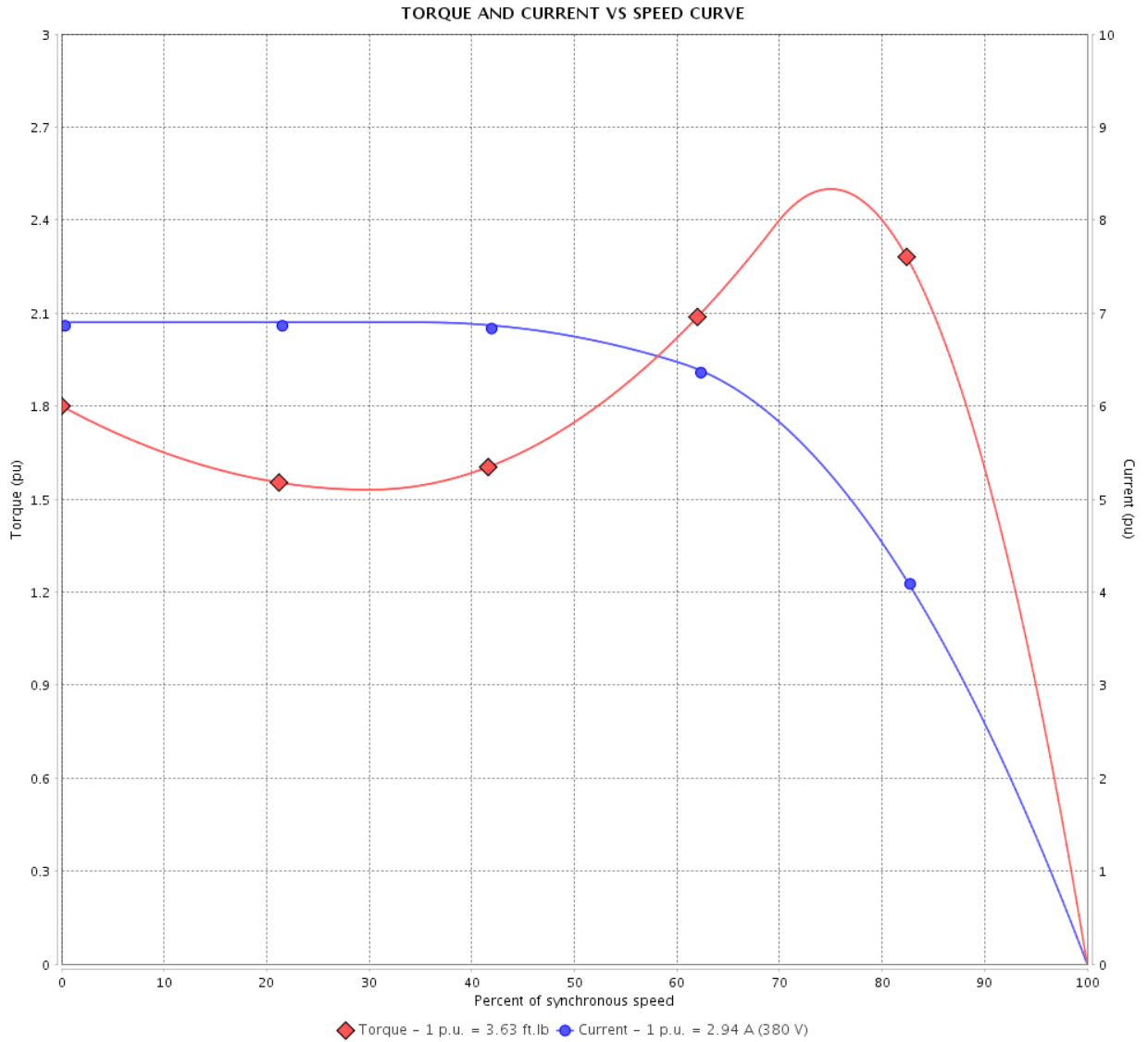
TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Premium Efficiency Three-Phase Product code : 12812242
 Catalog # : 00236OT3E56CFL-S



Performance : 190/380 V 50 Hz 2P

Rated current	: 5.88/2.94 A	Moment of inertia (J)	: 0.1151 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 3.63 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2890 rpm	Design	: A

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

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TORQUE AND CURRENT VS SPEED CURVE

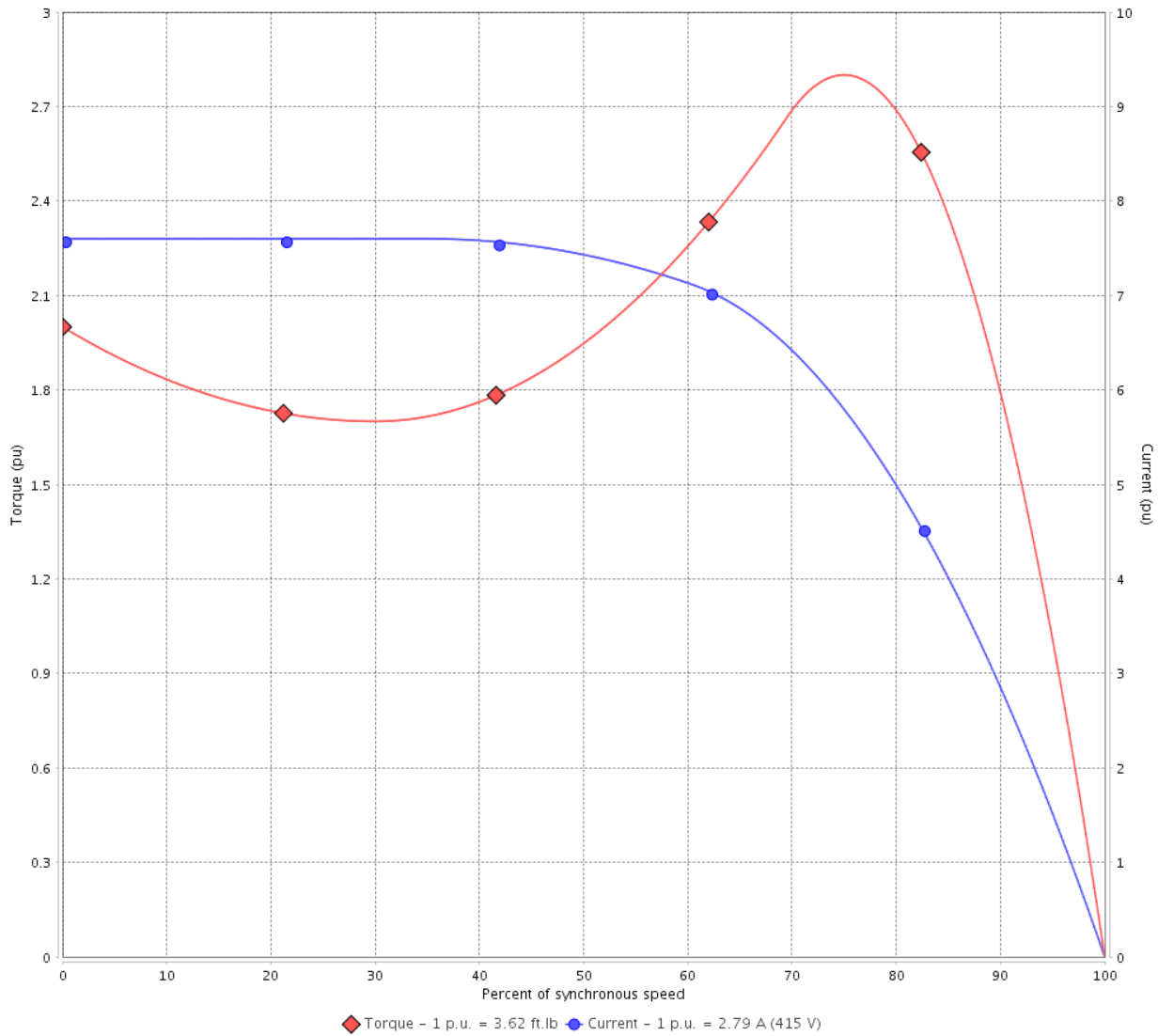
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12812242
 Catalog # : 002360T3E56CFL-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 5.26/2.79 A	Moment of inertia (J)	: 0.1151 sq.ft.lb
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 3.62 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2900 rpm	Design	: A

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

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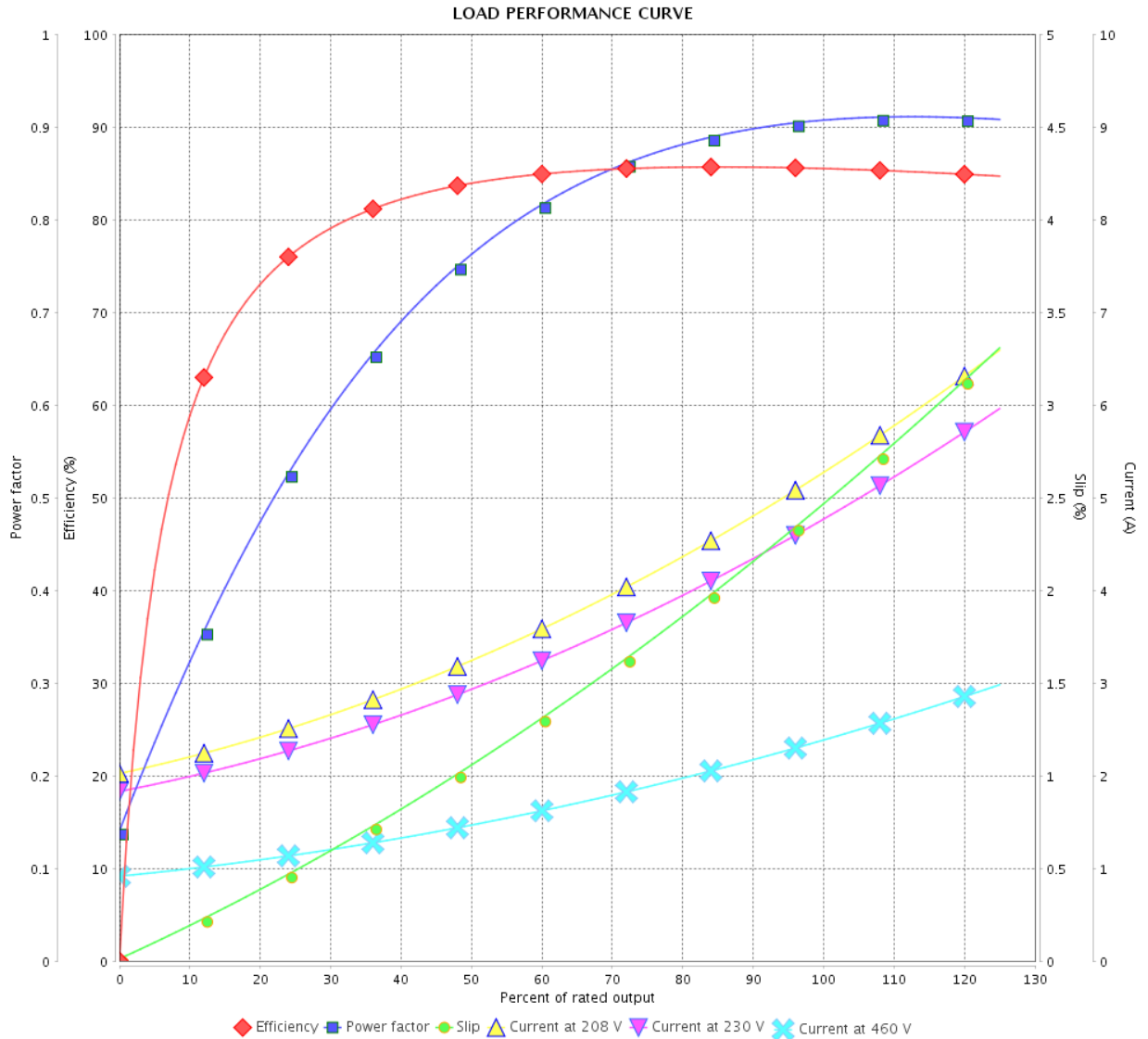
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



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 Catalog # : 00236OT3E56CFL-S



Performance : 230/460 V 60 Hz 2P

Rated current : 4.84/2.42 A
 LRC : 8.9
 Rated torque : 2.99 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.1151 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : A

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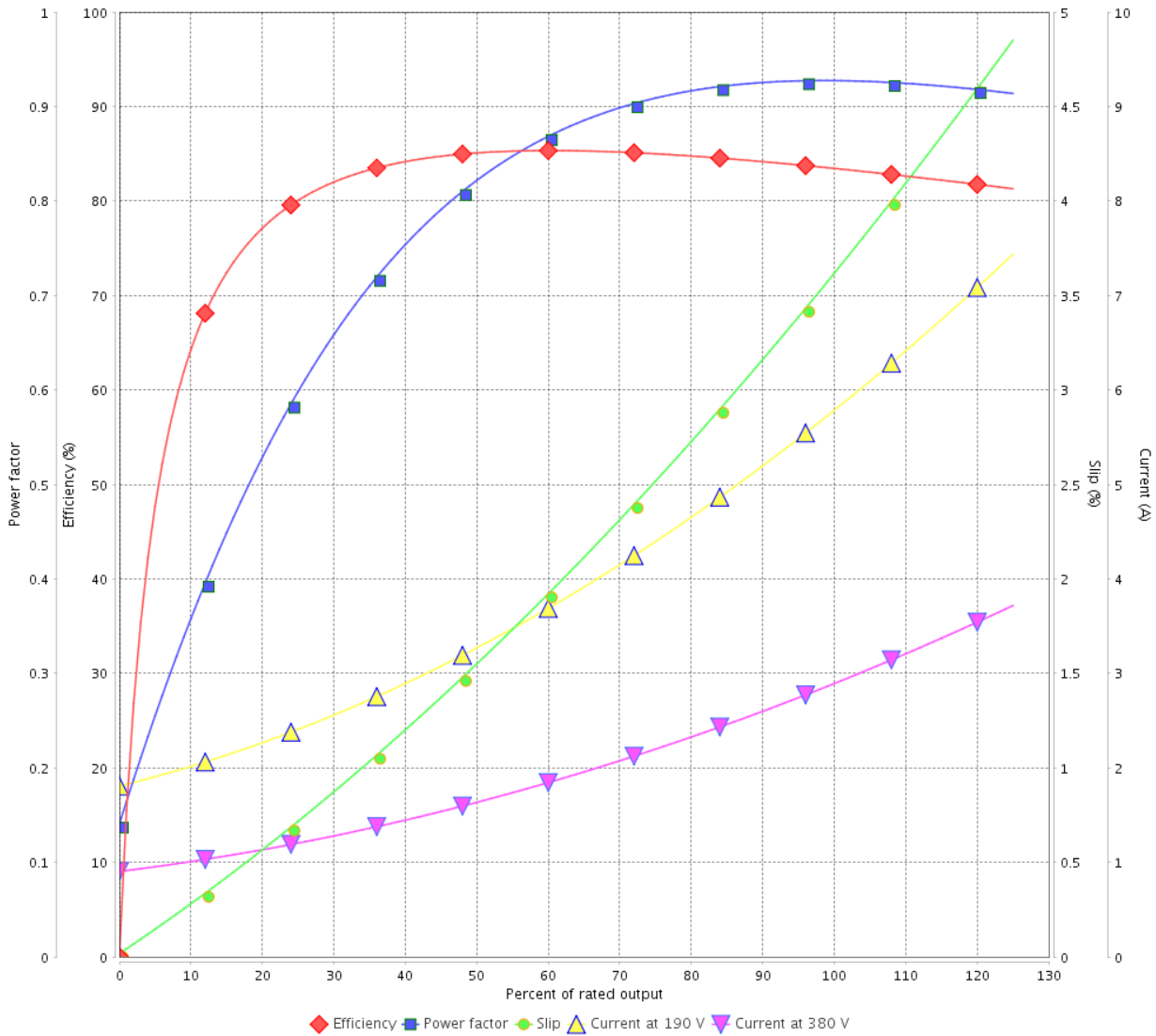
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Product line : Premium Efficiency Three-Phase Product code : 12812242
 Catalog # : 002360T3E56CFL-S

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current	: 5.88/2.94 A	Moment of inertia (J)	: 0.1151 sq.ft.lb
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 3.63 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2890 rpm	Design	: A

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Three Phase Induction Motor - Squirrel Cage



Customer : _____

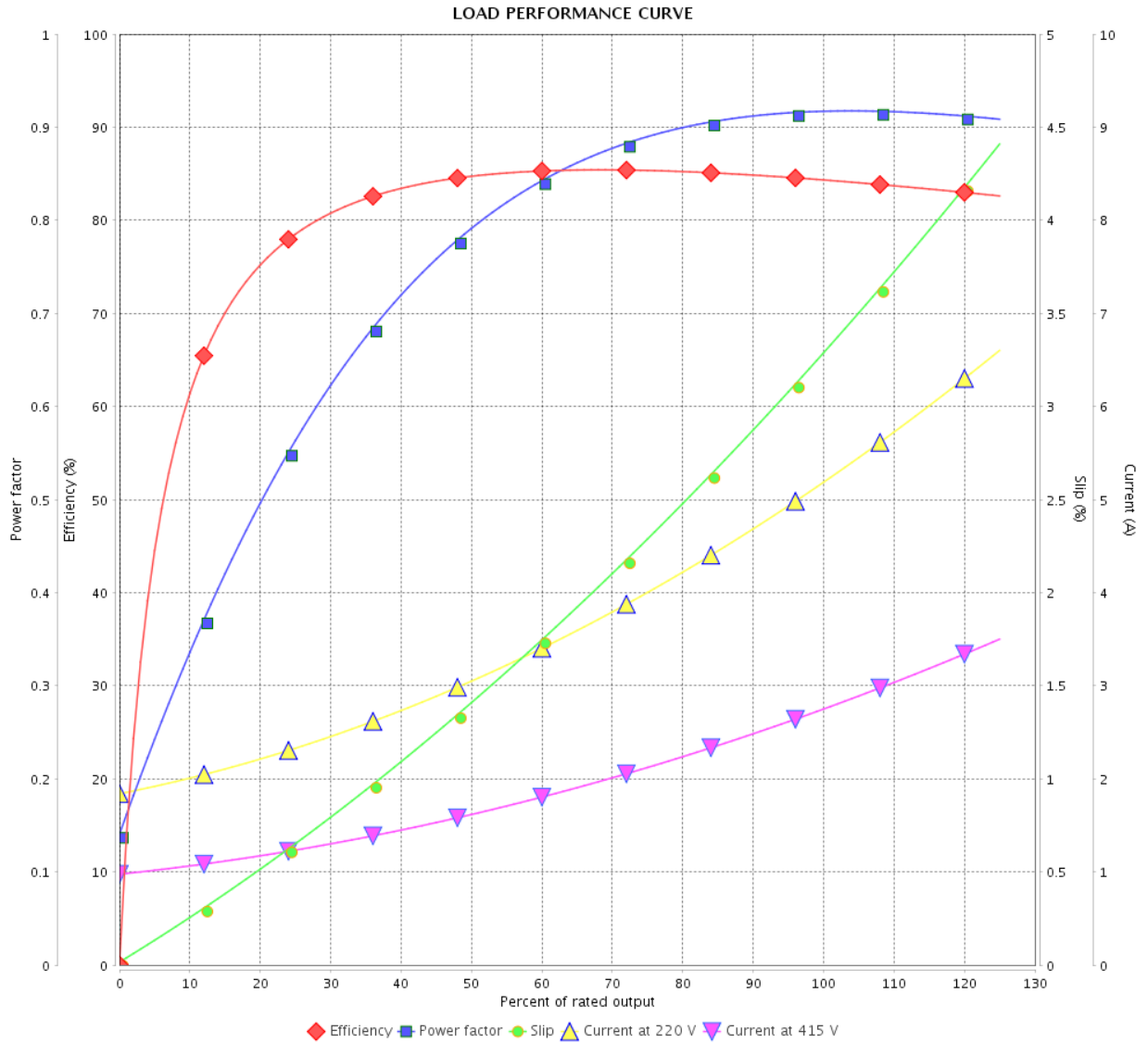
Product line : Premium Efficiency Three-Phase

Product code :

12812242

Catalog # :

00236OT3E56CFL-S



Performance : 220/415 V 50 Hz 2P

Rated current : 5.26/2.79 A
 LRC : 7.6
 Rated torque : 3.62 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 280 %
 Rated speed : 2900 rpm

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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase

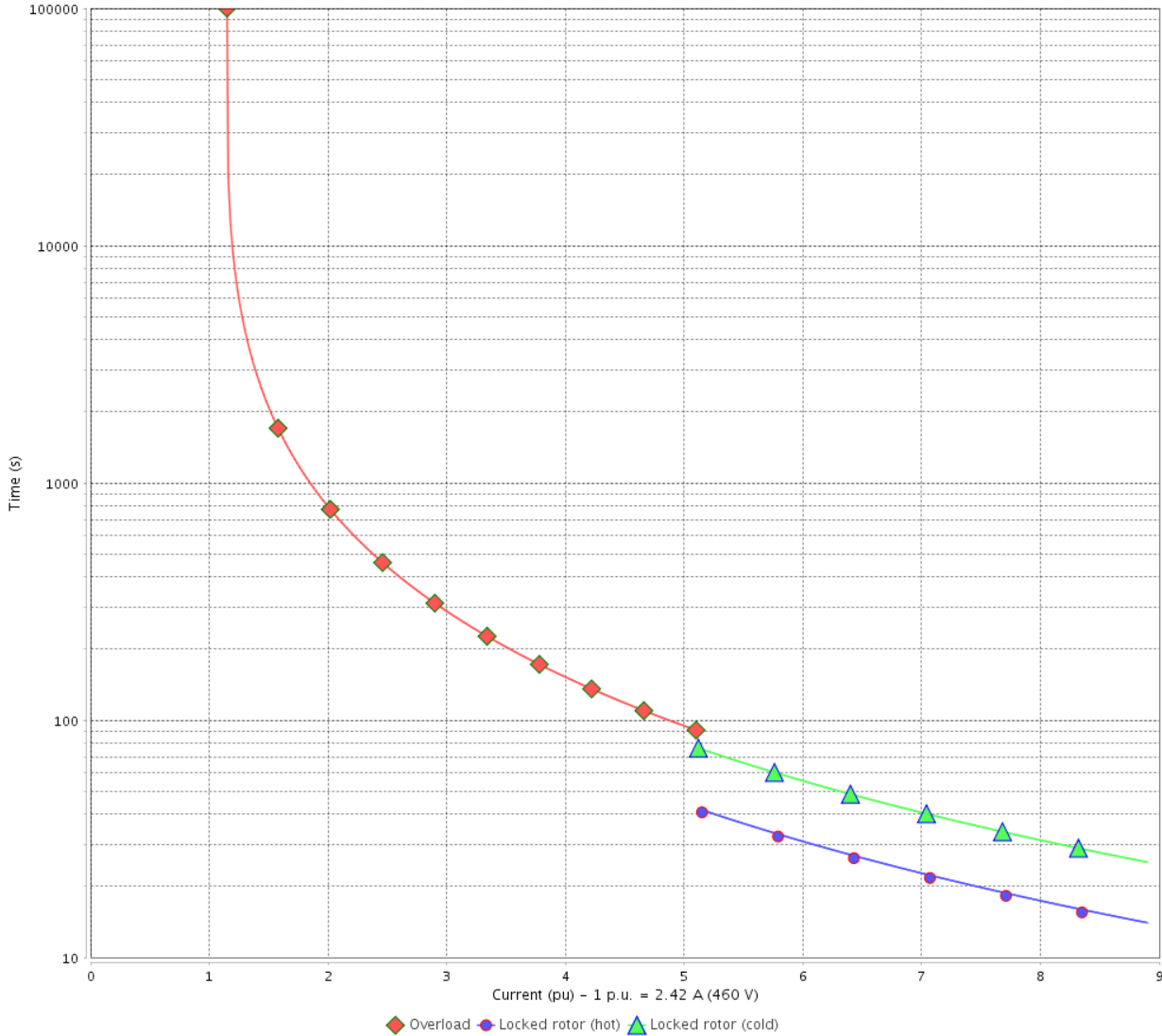
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002360T3E56CFL-S

THERMAL LIMIT CURVE



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Rated current : 4.84/2.42 A
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 Rated torque : 2.99 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.1151 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : A

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

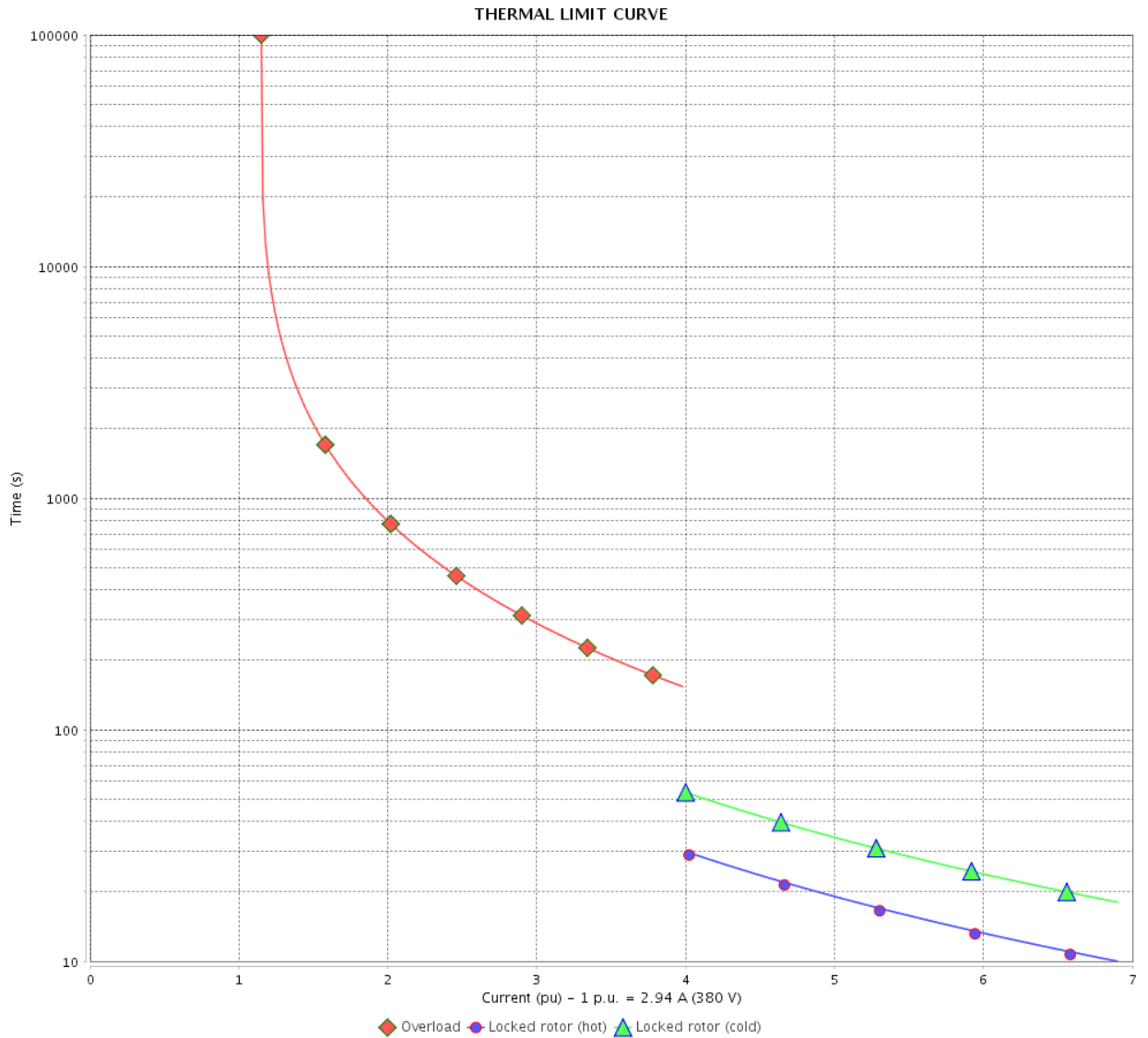
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 LRC : 6.9
 Rated torque : 3.63 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 250 %
 Rated speed : 2890 rpm

Moment of inertia (J) : 0.1151 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : A

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

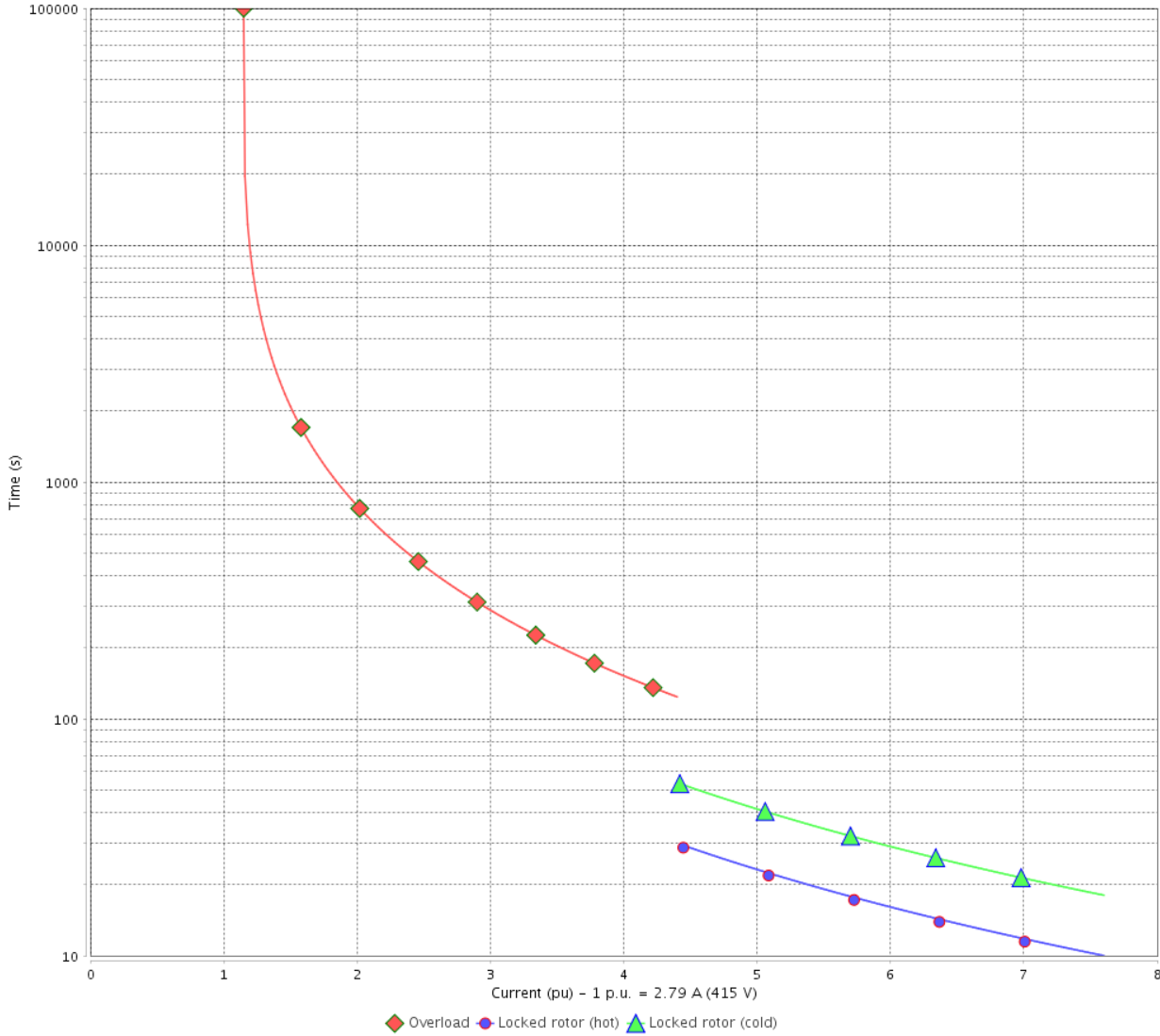
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Rated torque	: 3.62 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2900 rpm	Design	: A

Heating constant

Cooling constant

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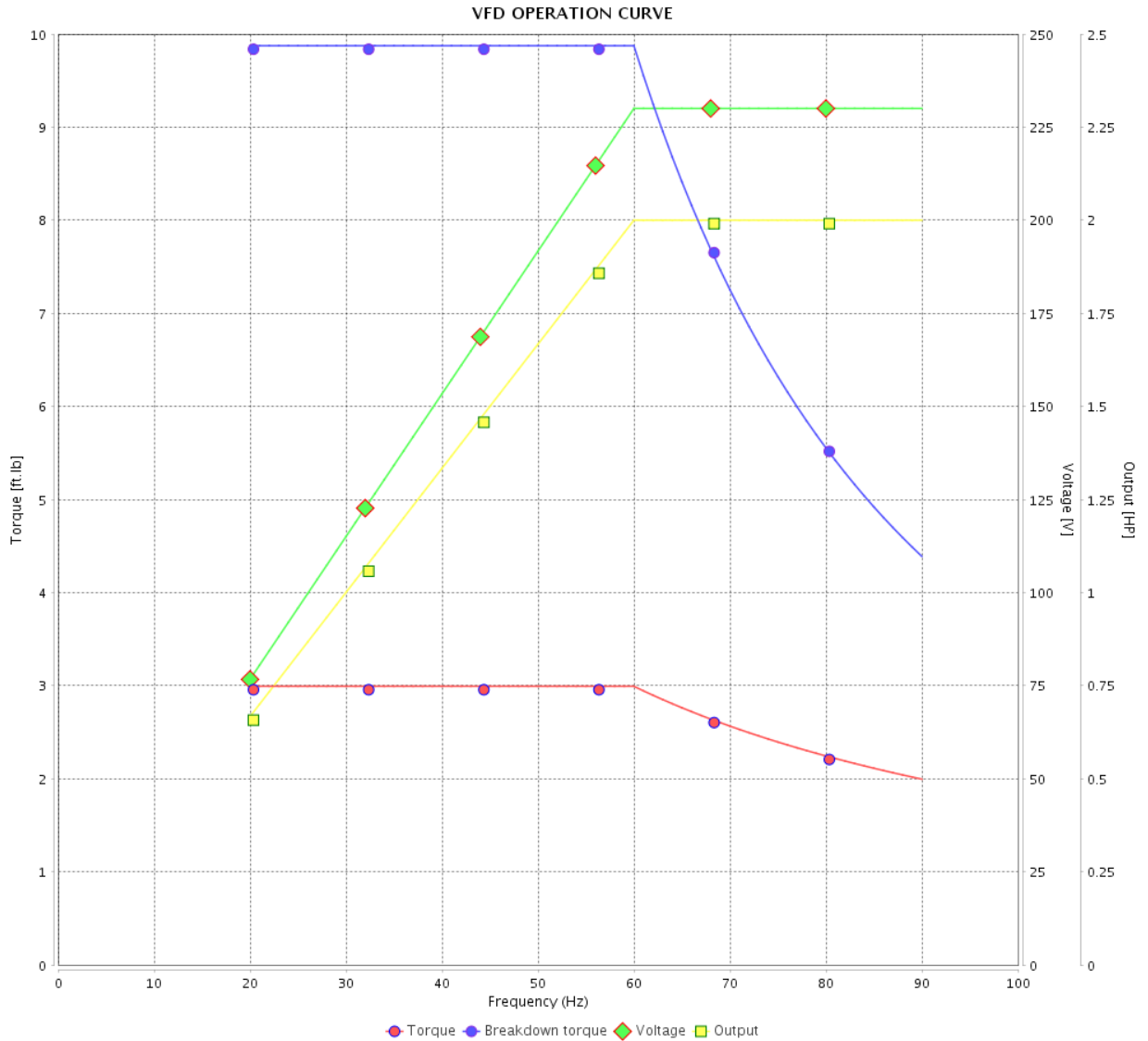
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



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Performance : 230/460 V 60 Hz 2P

Rated current : 4.84/2.42 A
 LRC : 8.9
 Rated torque : 2.99 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 330 %
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.1151 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : A

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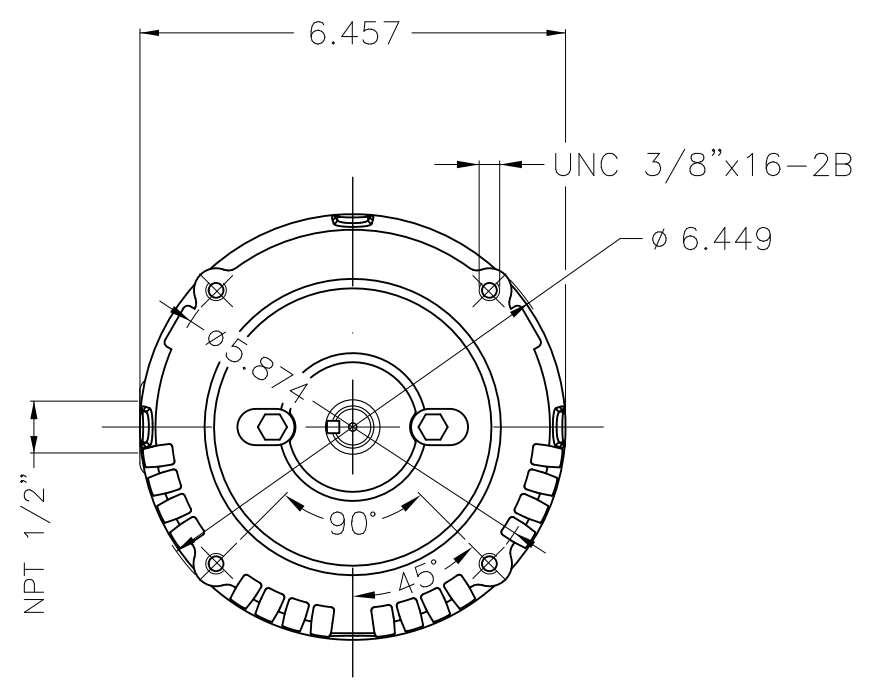
A

B

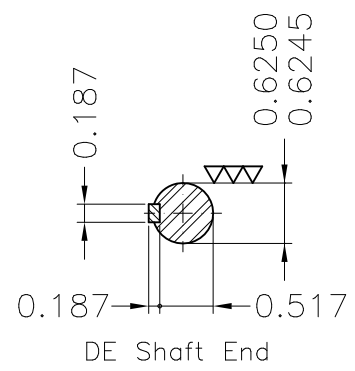
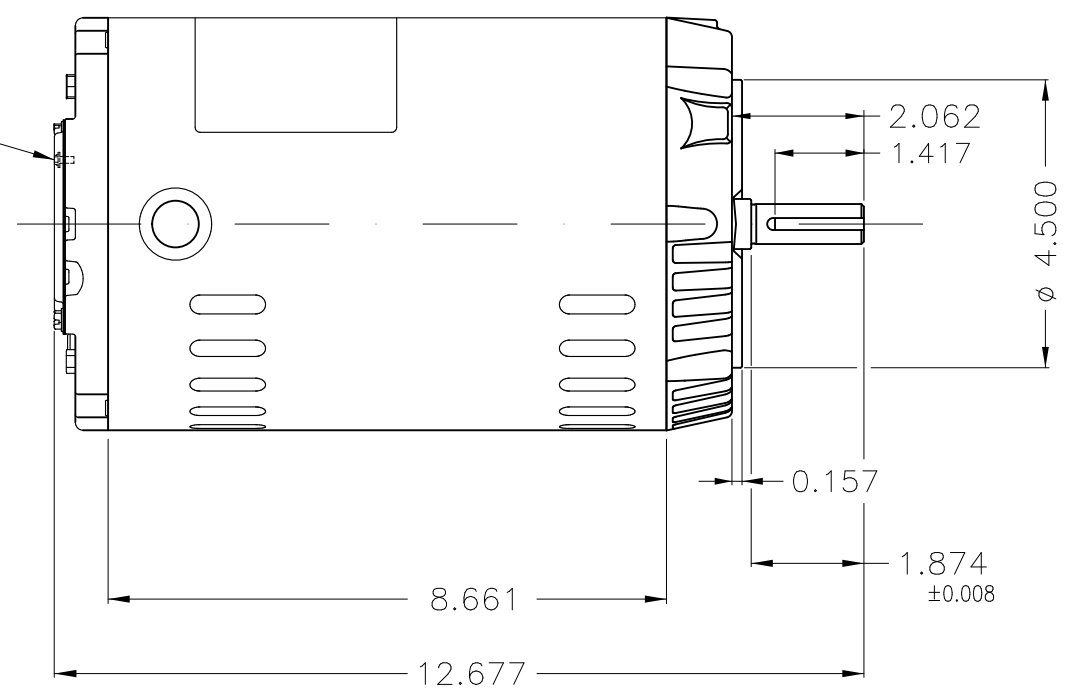
C

D

E



Grounding



Dimensions in inches

Without coating										
Mounting F-1/B14R(D)										
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.				PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 56C IP21 ODP								
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering						

2 HP 02 Poles 60 Hz

A

XME A3

**NEMA**
Premium

MADE IN MEXICO

MAT: 12812242

W01.T00IC0X0X

MODEL 00236OT3E56CFL-S
24MAR2022 B/N:

PH 3	Hz 60	HP 2.0
FR 56C		KW 1.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 4.84/2.42
INS CL F AT 80K		SFA 5.57/2.78
AMB 40°C	DES A	SF 1.15
ENCL ODP	CODE K	PF 0.91
USABLE @ 208V 5.35A		RPM 3510
SF1.00		NEMA NOM. EFF 85.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.15
5.88-5.11/2.94-2.71A 2890RPM EFF 83.4% (IE2) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 3:1 CT

DE 6204-ZZ	ODE 6202-ZZ	MOBIL POLYREX EM
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T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-BRK RED

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.

