

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:			
Product line	: Standard Efficiency Three-Phase	Product code :	14796867	
		Catalog # :	.2536ES3E56C-S	
Frame	: 56C	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	: 18.3 lb	
Protection degree	: IP55	Moment of inertia (J)	: 0.0389 sq.ft.lb	
Output [HP]	0.25	0.25	0.25	
Poles	2	2	2	
Frequency [Hz]	60	50	50	
Rated voltage [V]	208-230/460	190/380	220/415	
Rated current [A]	1.01-0.914/0.457	0.938/0.469	0.855/0.453	
L. R. Amperes [A]	6.46-5.85/2.92	5.07/2.53	5.04/2.67	
LRC [A]	6.4x(Code L)	5.4x(Code H)	5.9x(Code J)	
No load current [A]	0.431-0.500/0.250	0.420/0.210	0.421/0.223	
Rated speed [RPM]	3475	2860	2875	
Slip [%]	3.47	4.67	4.17	
Rated torque [ft.lb]	0.378	0.459	0.457	
Locked rotor torque [%]	250	190	220	
Breakdown torque [%]	300	250	280	
Service factor		1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	108s (cold) 60s (hot)	133s (cold) 74s (hot)	120s (cold) 67s (hot)	
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)	
Efficiency (%)	25%	42.6	52.9	52.1
	50%	46.0	55.3	54.8
	75%	52.5	62.0	61.9
	100%	57.5	64.8	65.2
Power Factor	25%	0.48	0.52	0.49
	50%	0.75	0.79	0.76
	75%	0.82	0.86	0.84
	100%	0.86	0.90	0.88
Bearing type	: Drive end 6203 ZZ	Non drive end 6202 ZZ	Foundation loads	
Sealing	: V'Ring	Without Bearing Seal	Max. traction : 3 lb	
			Max. compression : 21 lb	
Lubrication interval	: -	-		
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V SF 1.00				
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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Performed by				
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TORQUE AND CURRENT VS SPEED CURVE

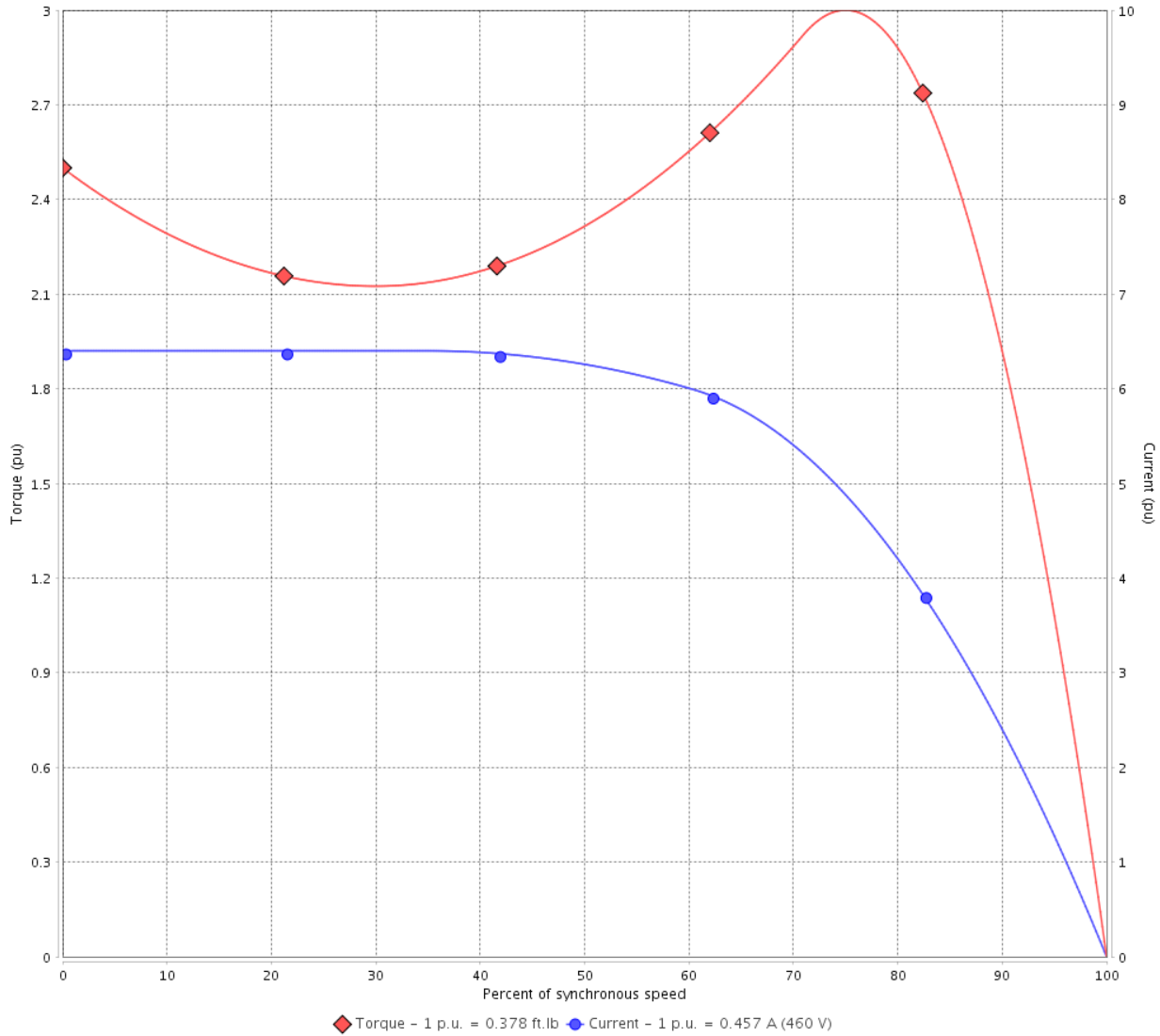
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 14796867
 Catalog # : .2536ES3E56C-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 208-230/460 V 60 Hz 2P

Rated current	: 1.01-0.914/0.457 A	Moment of inertia (J)	: 0.0389 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.378 ft.lb	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	:
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 3475 rpm		

Locked rotor time : 108s (cold) 60s (hot)

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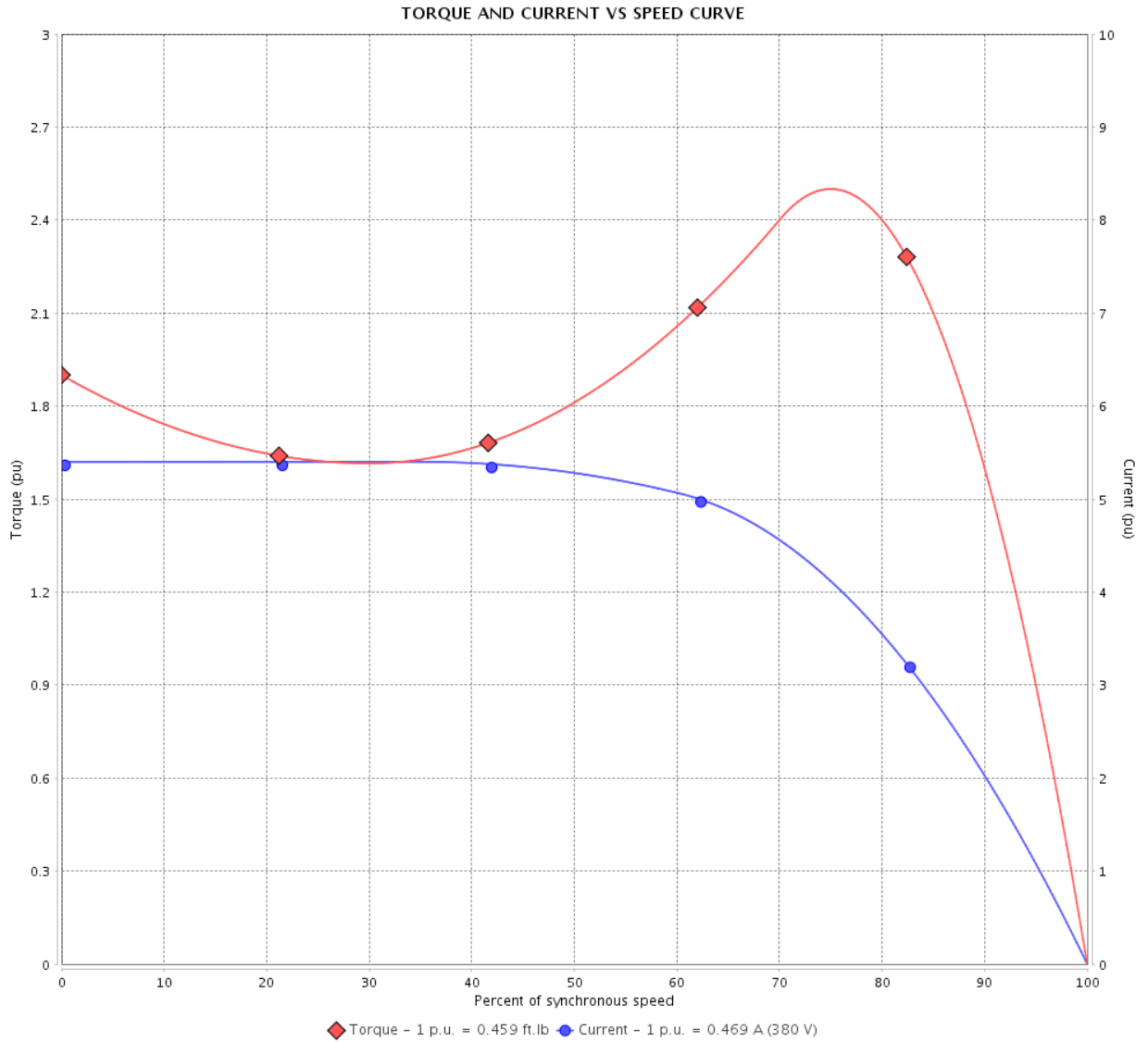
TORQUE AND CURRENT VS SPEED CURVE



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : Standard Efficiency Three-Phase Product code : 14796867
 Catalog # : .2536ES3E56C-S



Performance : 190/380 V 50 Hz 2P

Rated current : 0.938/0.469 A	Moment of inertia (J) : 0.0389 sq.ft.lb
LRC : 5.4	Duty cycle : Cont.(S1)
Rated torque : 0.459 ft.lb	Insulation class : F
Locked rotor torque : 190 %	Service factor : 1.15
Breakdown torque : 250 %	Temperature rise : 80 K
Rated speed : 2860 rpm	

Locked rotor time : 133s (cold) 74s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

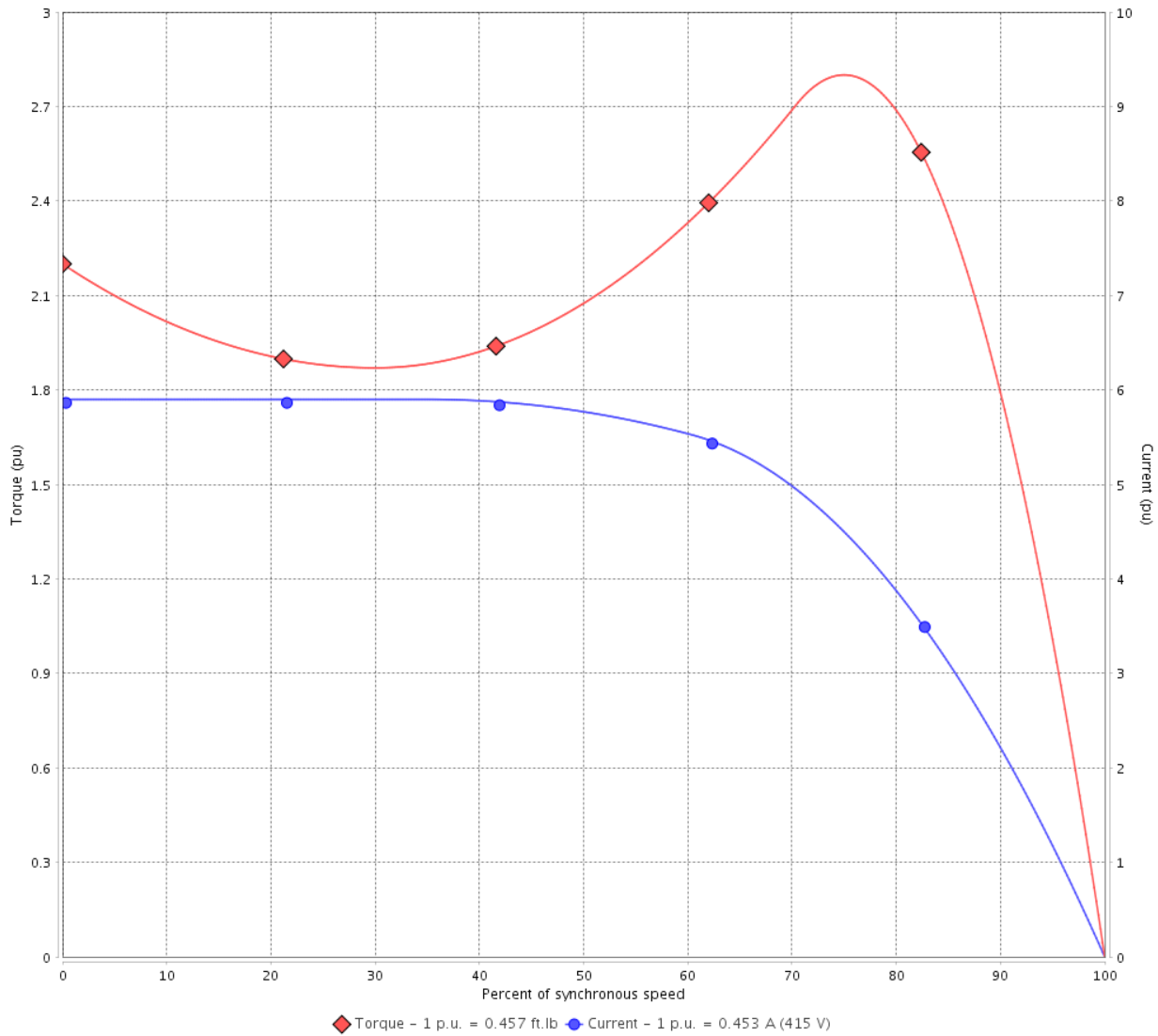
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Standard Efficiency Three-Phase Product code : 14796867
 Catalog # : .2536ES3E56C-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 0.855/0.453 A	Moment of inertia (J)	: 0.0389 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 0.457 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2875 rpm		

Locked rotor time : 120s (cold) 67s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

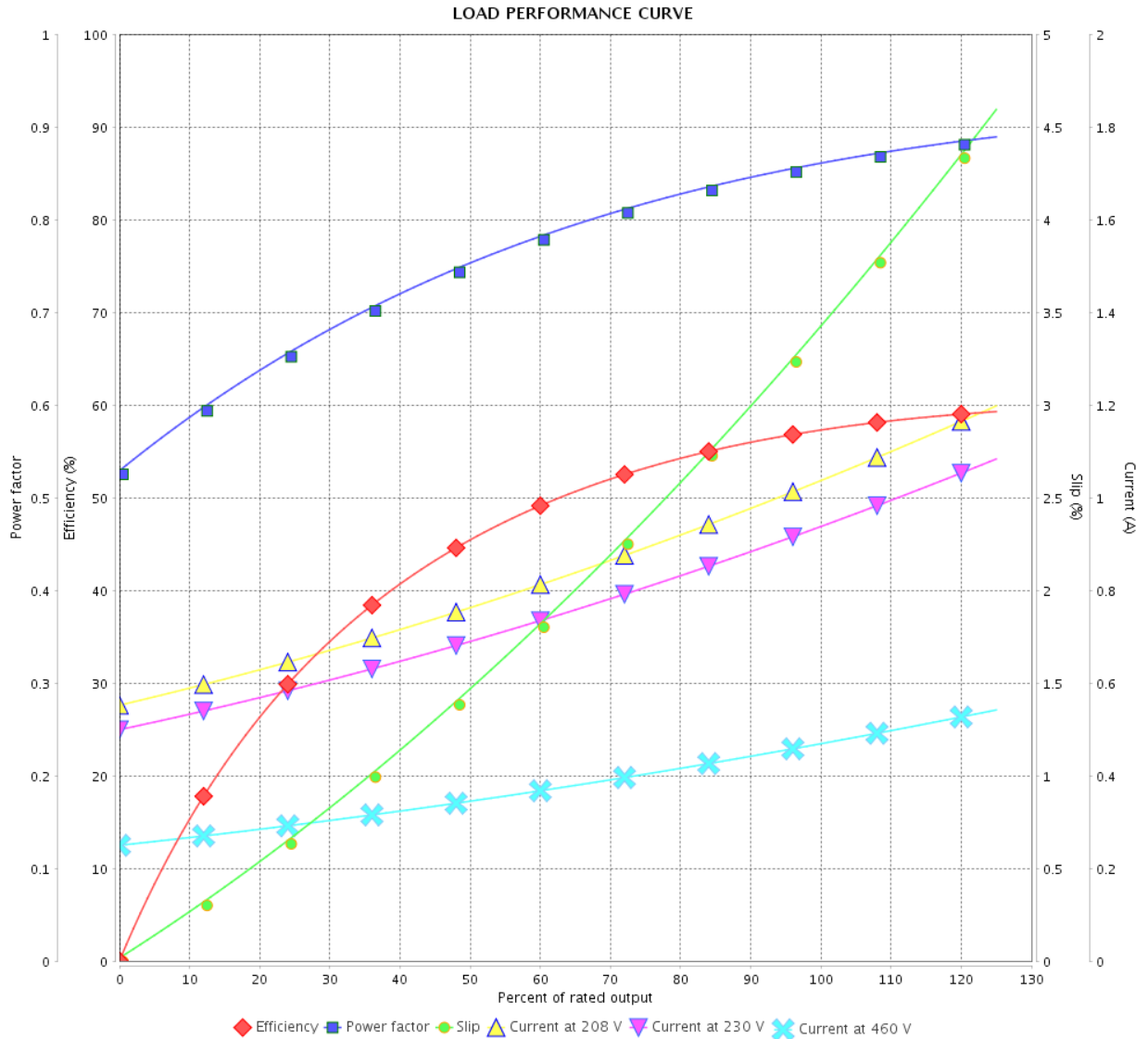
Product line : Standard Efficiency Three-Phase

Product code :

14796867

Catalog # :

.2536ES3E56C-S



Performance : 208-230/460 V 60 Hz 2P

Rated current : 1.01-0.914/0.457 A
 LRC : 6.4
 Rated torque : 0.378 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0389 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

Rev.	Changes Summary	Performed	Checked	Date
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Date				

LOAD PERFORMANCE CURVE

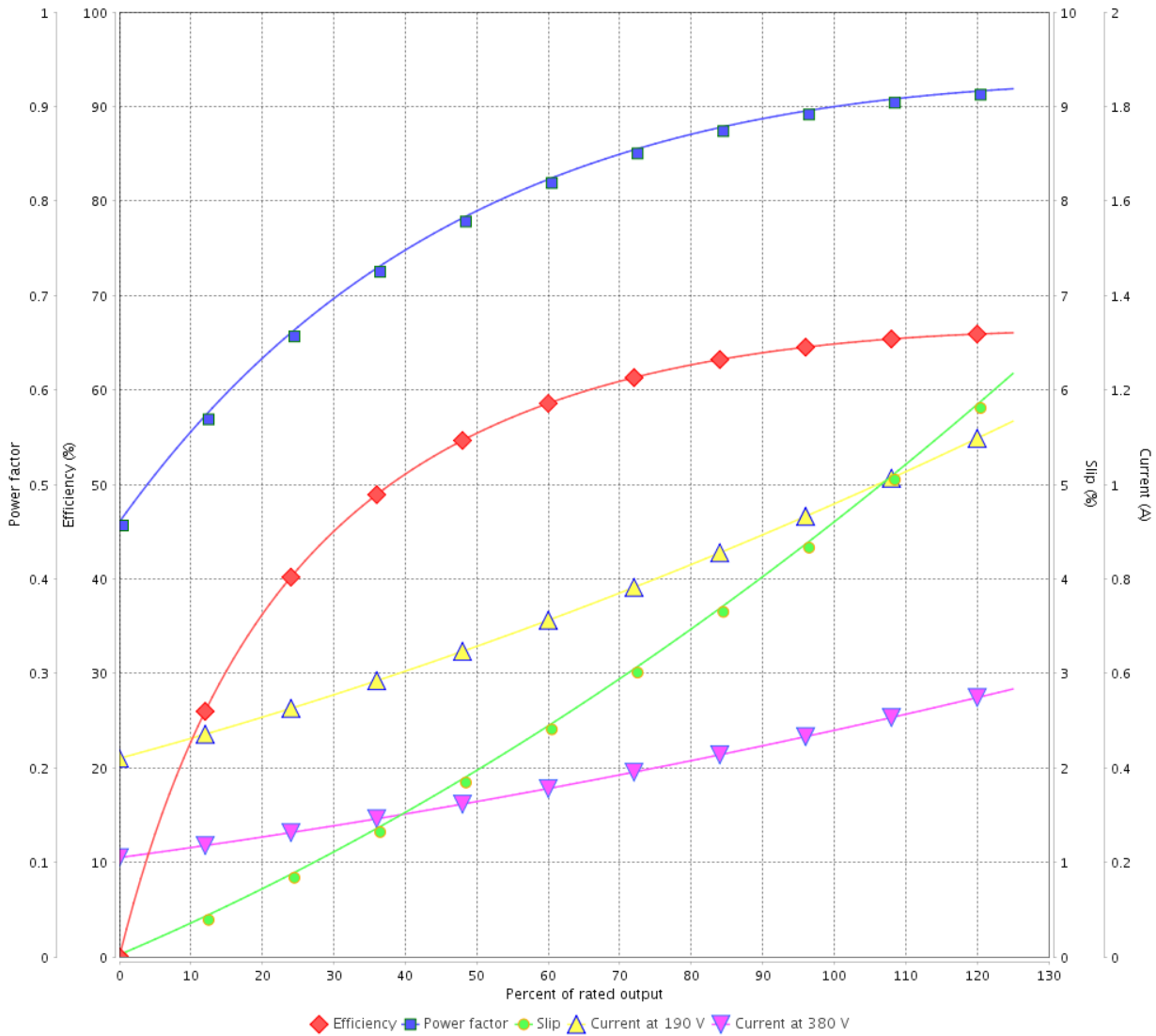
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Customer : _____

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 Catalog # : .2536ES3E56C-S

LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 2P

Rated current	: 0.938/0.469 A	Moment of inertia (J)	: 0.0389 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.459 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2860 rpm		

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

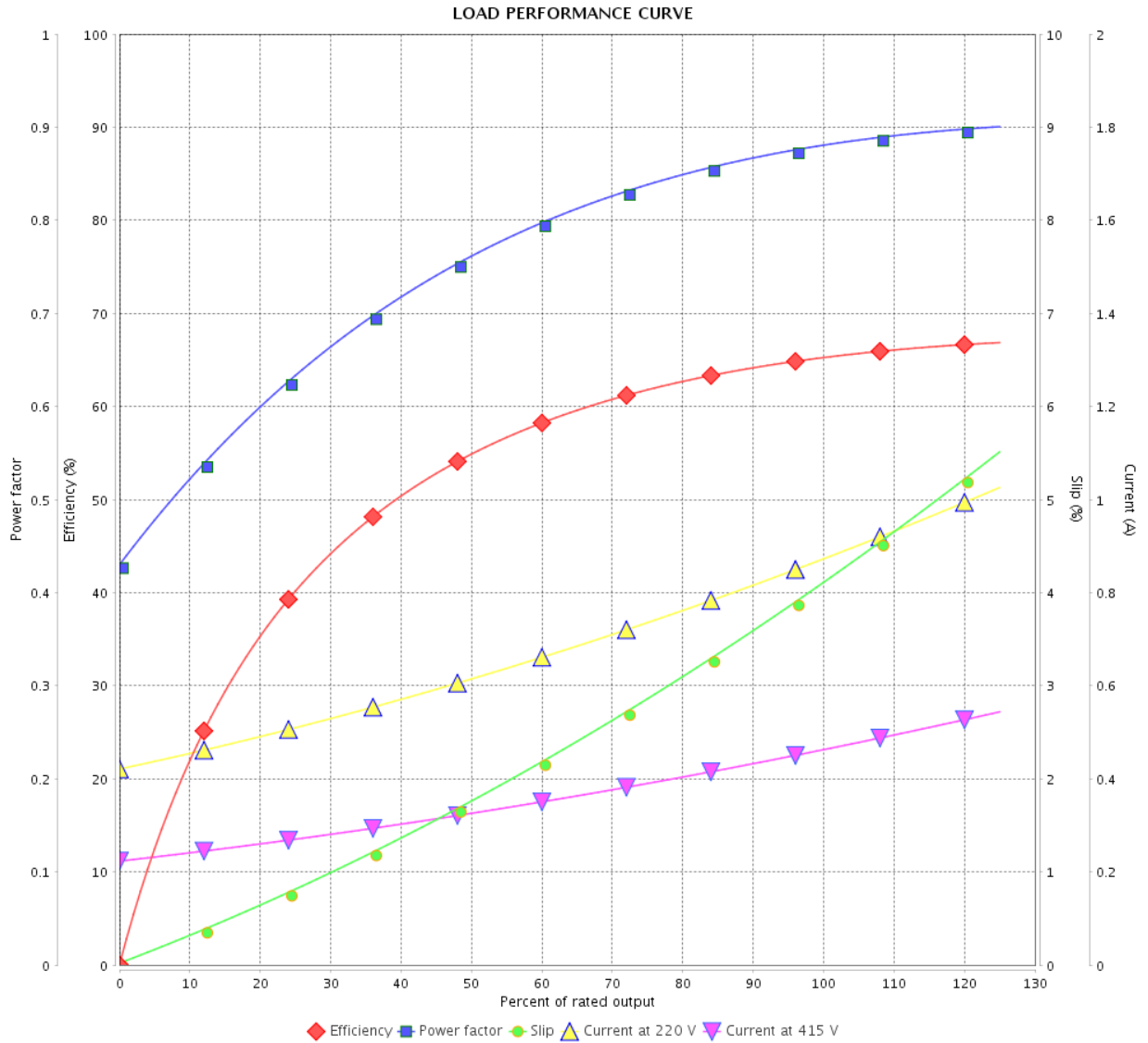
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Product code :

14796867

Catalog # :

.2536ES3E56C-S



Performance : 220/415 V 50 Hz 2P

Rated current : 0.855/0.453 A
 LRC : 5.9
 Rated torque : 0.457 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 280 %
 Rated speed : 2875 rpm

Moment of inertia (J) : 0.0389 sq.ft.lb
 Duty cycle : Cont.(S1)
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 Service factor : 1.15
 Temperature rise : 80 K

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

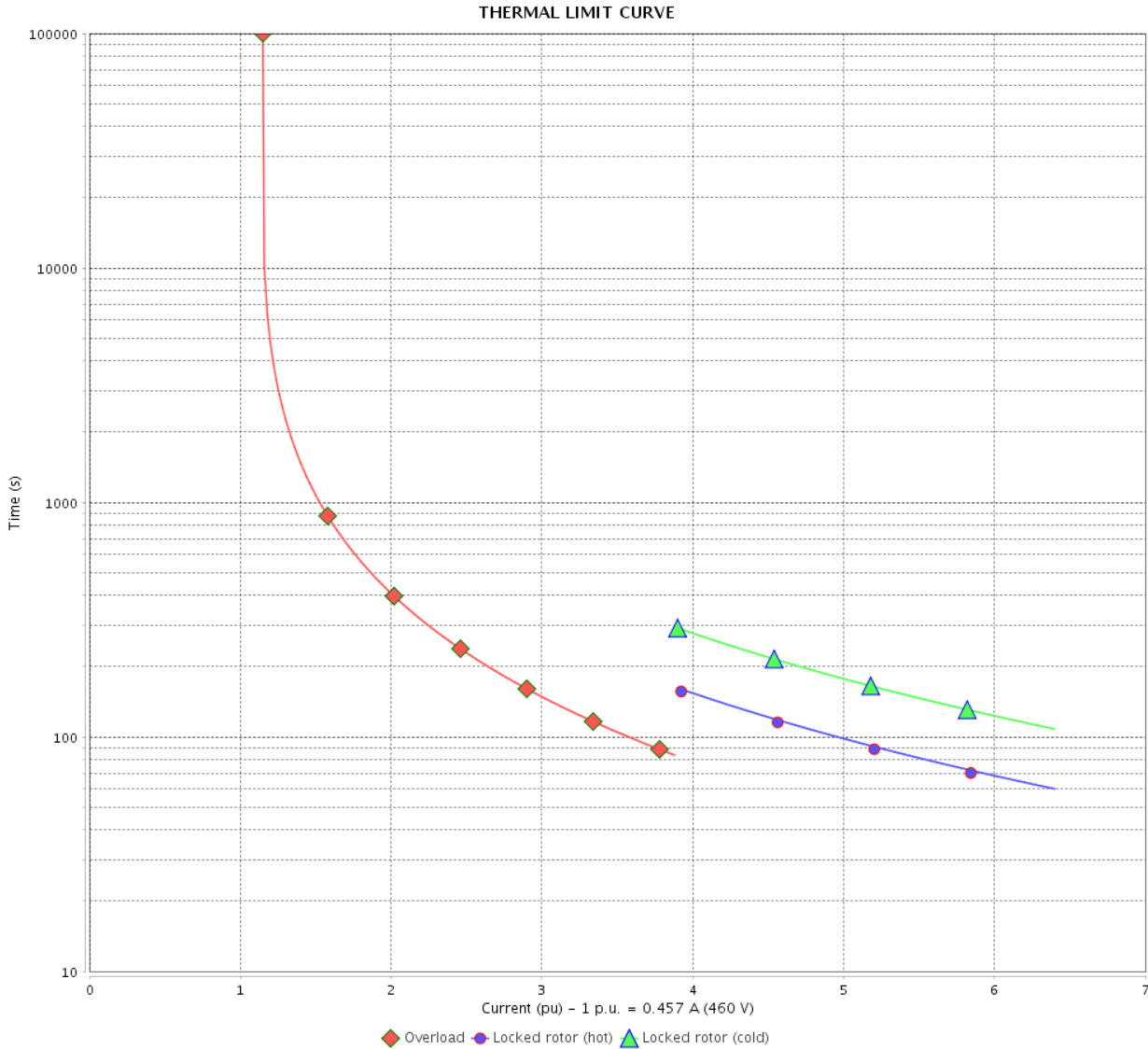
Product line : Standard Efficiency Three-Phase

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 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0389 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

Heating constant

Cooling constant

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____

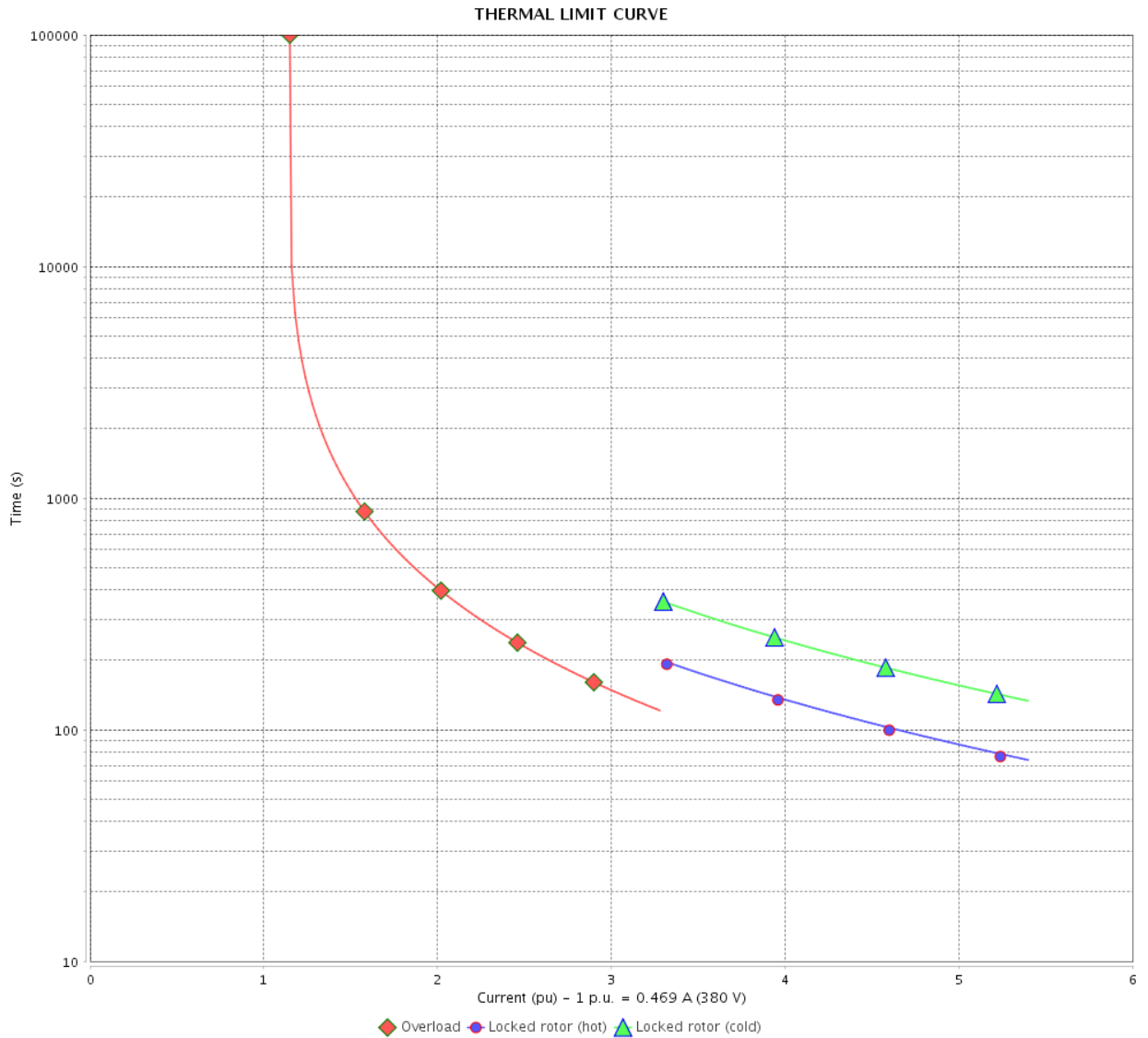
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Cooling constant

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THERMAL LIMIT CURVE

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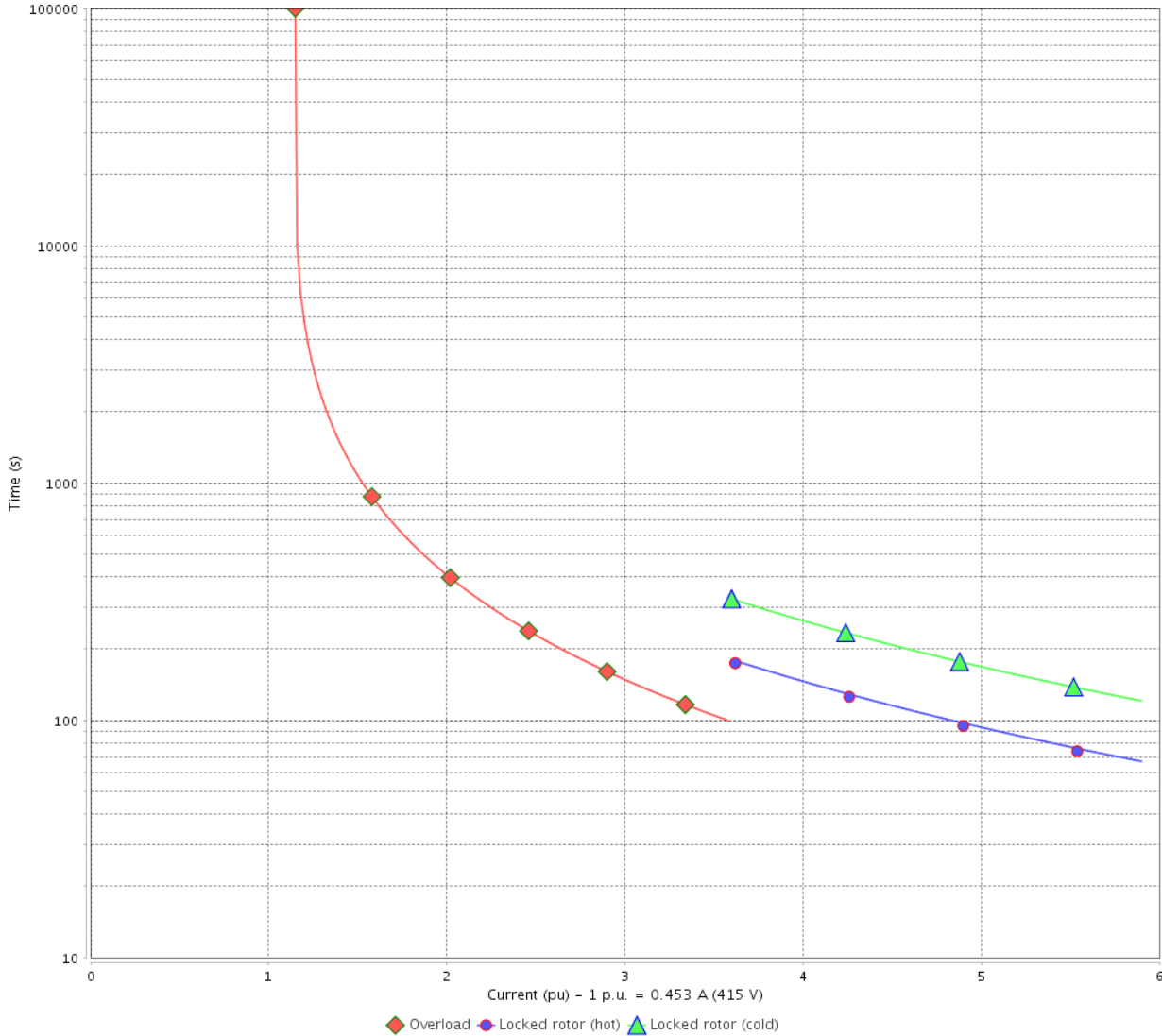
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Moment of inertia (J) : 0.0389 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
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 Temperature rise : 80 K

Heating constant

Cooling constant

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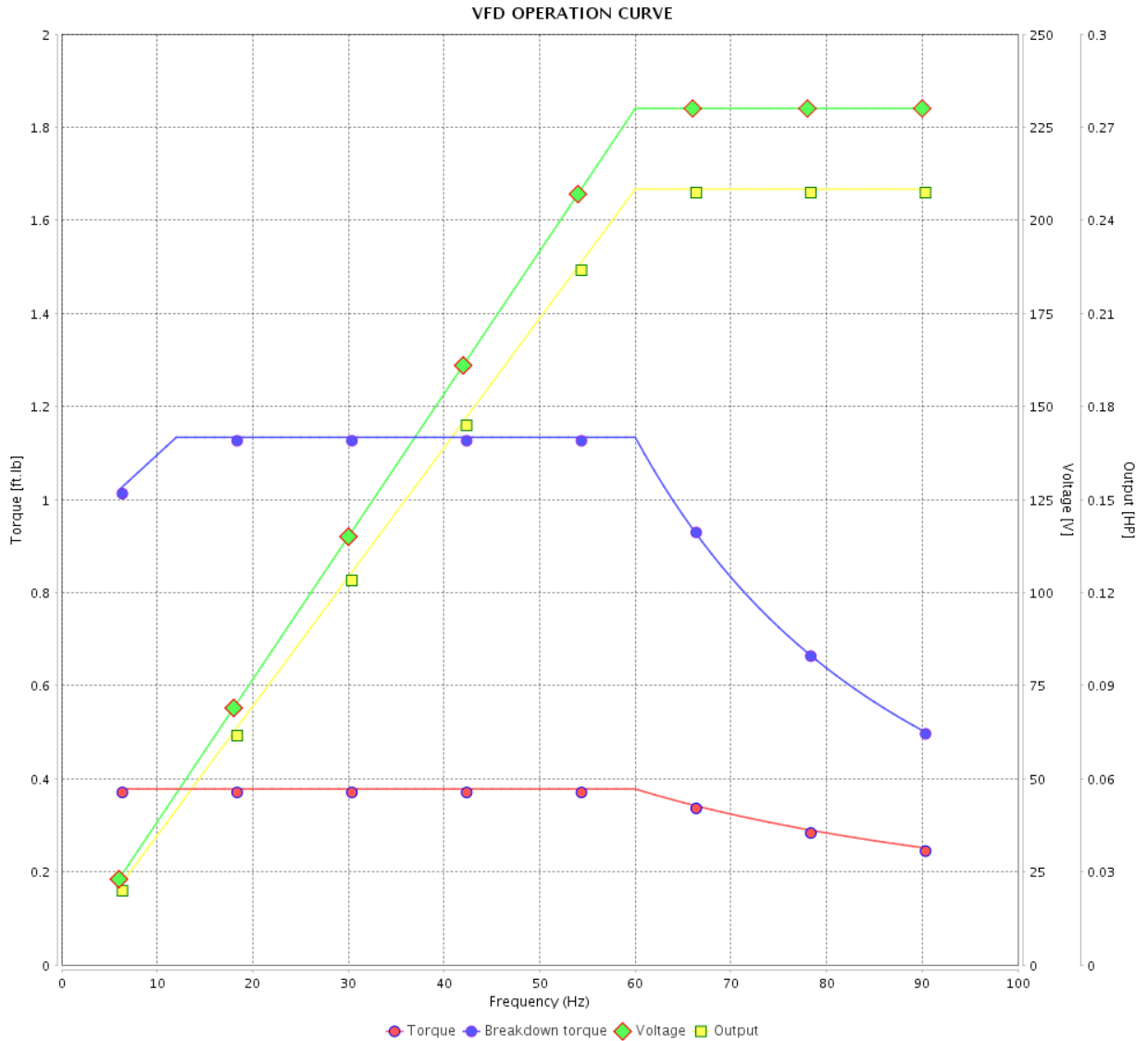
VFD OPERATION CURVE

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 Catalog # : .2536ES3E56C-S



Performance : 208-230/460 V 60 Hz 2P

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 LRC : 6.4
 Rated torque : 0.378 ft.lb
 Locked rotor torque : 250 %
 Breakdown torque : 300 %
 Rated speed : 3475 rpm

Moment of inertia (J) : 0.0389 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K

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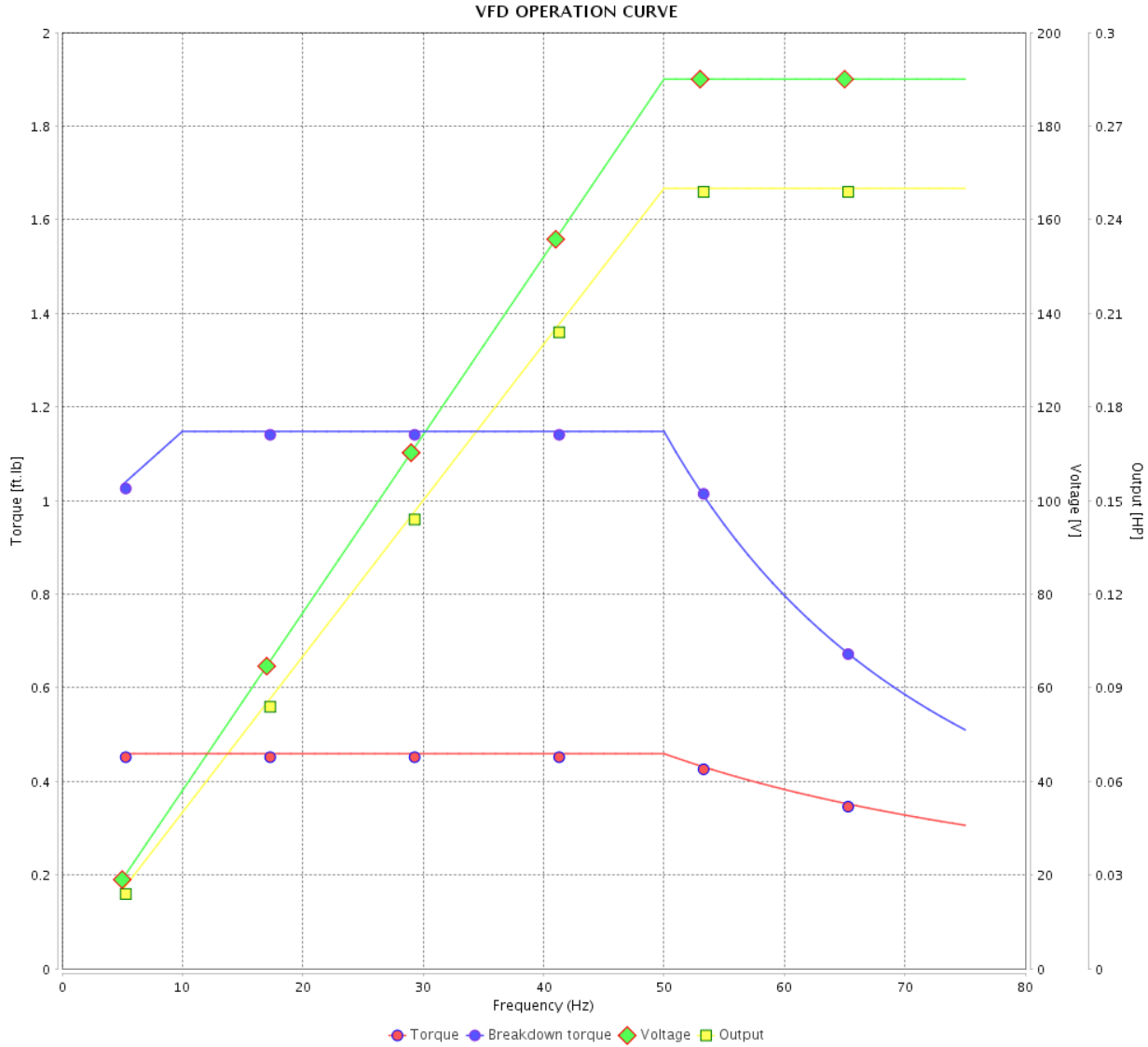
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Rated torque	: 0.459 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2860 rpm		

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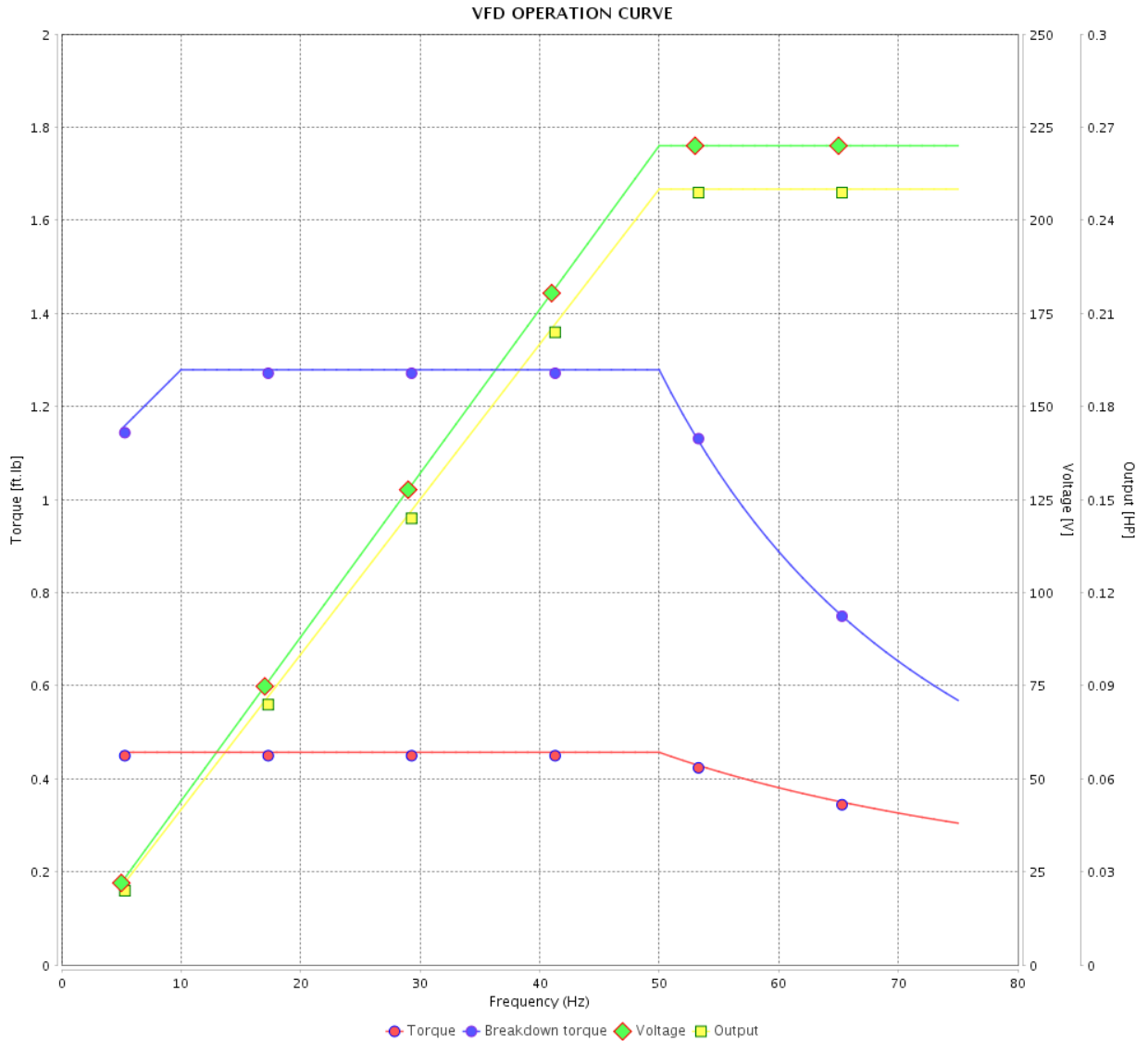
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 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K

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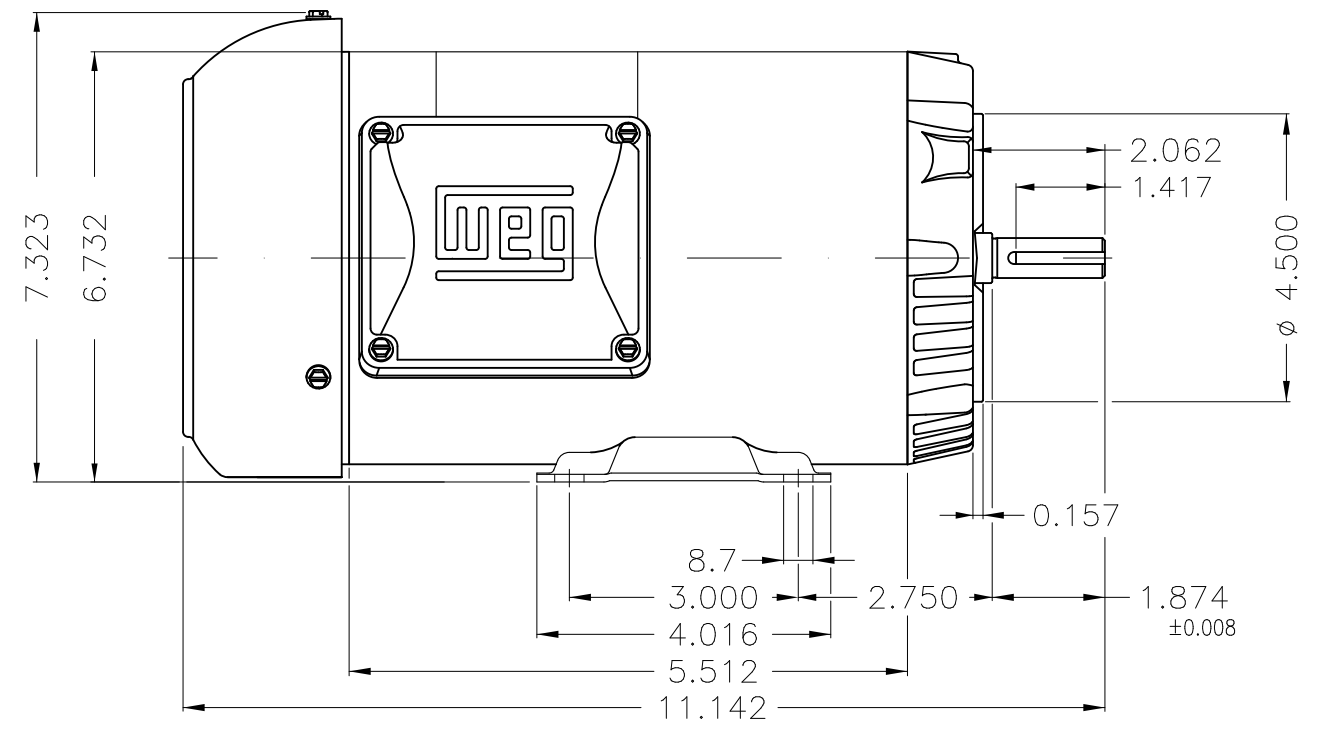
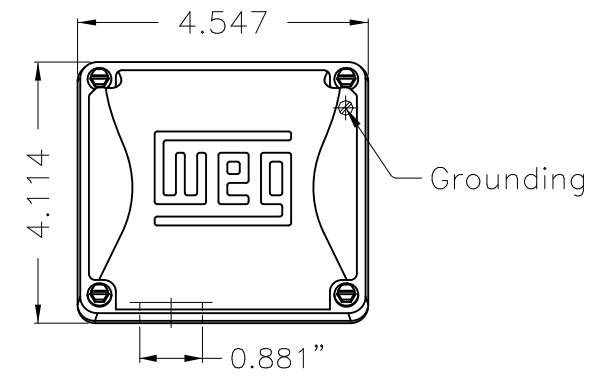
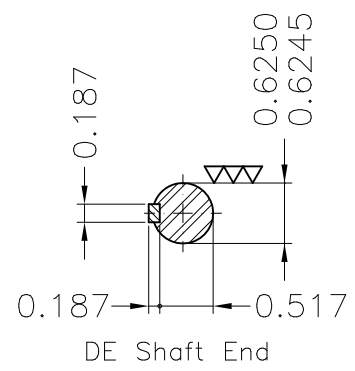
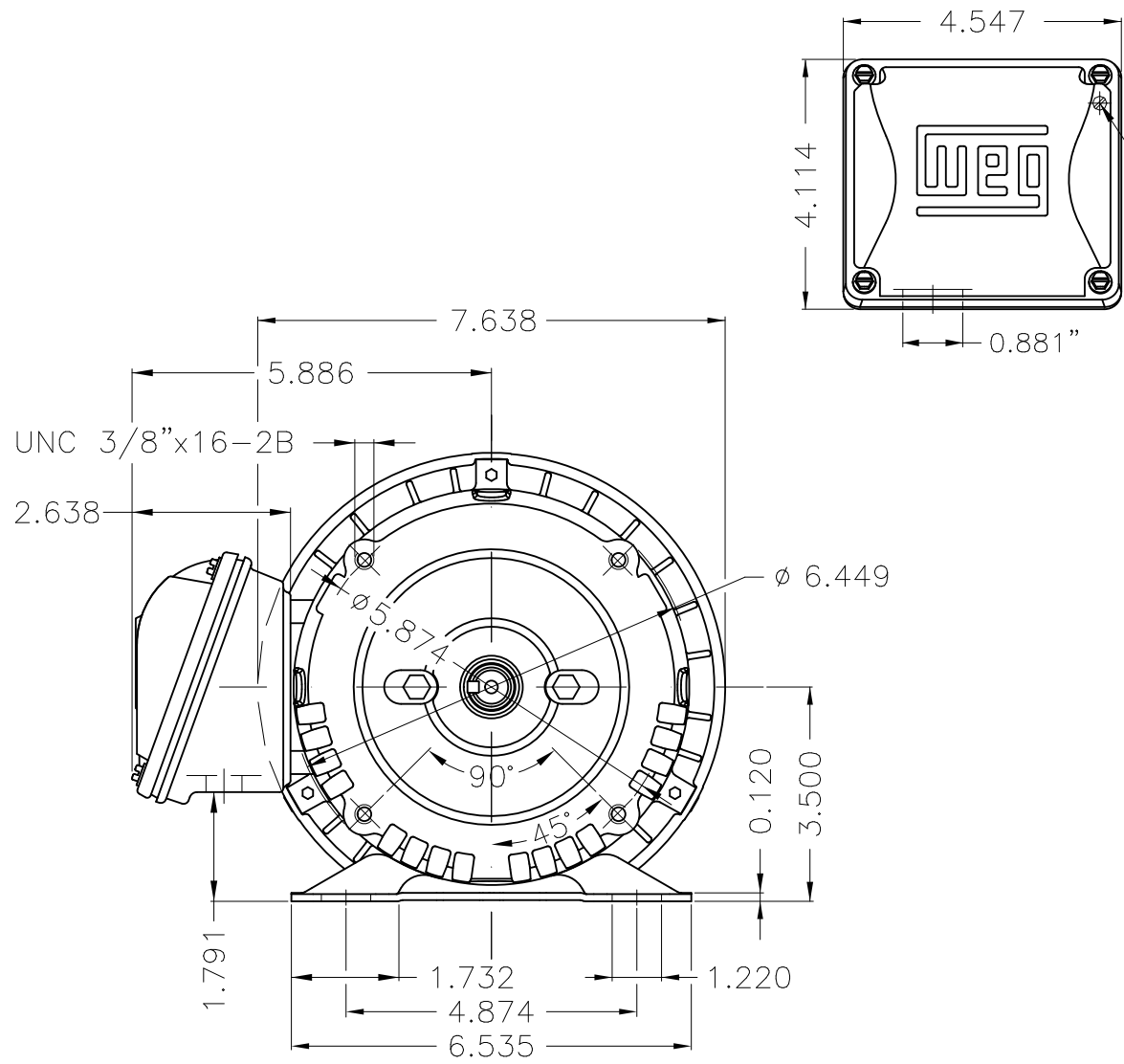
A

B

C

D

E

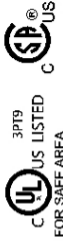


Fan cover - steel plate
 Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B34R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER		THREE PH. MOTOR ROLLED STEEL			PREVIEW	WDD	SHEET	1 / 1
CHECKED			FRAME 56C IP55 TEFC						
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering					

0.25 HP 02 Poles 60 Hz





MADE IN MEXICO

MAT: 14796867

W01.TE0IC0X0X

MODEL 2536ES3E56C-S

22MAR2022 B/N:

**For 60Hz: Class I, Zone 2, IIC
Class I, Div.2, Gr. A,B,C,D - T3
Div 2 Inverter Duty (SF1.00)**

CT 2:1/VT 1000:1

PH 3	Hz 60	HP 0.25
FR 56C		KW 0.18
DUTY CONT.		V 208-230/460
ALT 1000 m.a.s.l.		A 1.01-0.914/0.457
INS CL F AT 80K	IP55	SFA 1.01-1.05/0.526
AMB 40°C	DES -	SF 1.15
ENCL TEFC	CODE L	PF 0.86
USABLE @ 208V SF1.00		RPM 3475
		NEMA NOM. EFF 57.5%

ALTERNATE RATING: 0.25HP 50Hz 190-220/380-415V SF1.15
0.938-0.832/0.489-0.441A 2860RPM EFF 84.8% (IE2) IEC 60034-1

For safe area-Inverter duty motor For 60Hz use on VPWM 1000:1 VT, 10:1 CT

DE 6203-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.

