## **DATA SHEET**

## Three Phase Induction Motor - Squirrel Cage



Customer

Product line : Premium Efficiency Three-Phase Product code: 12808928

> Catalog #: .2512OT3E56C-S

: 56C Cooling method Frame : IC01 - ODP Insulation class : F Mounting : F-1

Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line

: 1000 m.a.s.l. Altitude Approx. weight<sup>3</sup> : 17.1 lb

			Moment of inertia (J)	: 0.0622 sq.ft.lb
Output [HP]		0.25	0.25	0.25
Poles		6	6	6
Frequency [Hz]		60	50	50
Rated voltage [V]		208-230/460	190/380	220/415
Rated current [A]		1.21-1.10/0.549	1.18/0.588	1.13/0.597
L. R. Amperes [A]		5.83-5.27/2.64	4.70/2.35	4.73/2.51
LRC [A]		4.8x(Code K)	4.0x(Code G)	4.2x(Code H)
No load current [A	.]	0.862-1.00/0.500	0.942/0.471	0.956/0.507
Rated speed [RPI	Л]	1160	950	955
Slip [%]		3.33	5.00	4.50
Rated torque [ft.lb]		1.13	1.38	1.37
Locked rotor torque [%]		210	160	180
Breakdown torque [%]		280	220	250
Service factor			1.35	1.35
Temperature rise		80 K	80 K	80 K
Locked rotor time		72s (cold) 40s (hot)	82s (cold) 46s (hot)	73s (cold) 41s (hot)
Noise level <sup>2</sup>		50.0 dB(A)	48.0 dB(A)	48.0 dB(A)
	25%	52.2	55.9	52.7
Efficiency (%)	50%	55.0	57.9	55.3
Liliciency (70)	75%	64.0	64.3	62.8
	100%	67.5	66.4	65.9
	25%	0.22	0.27	0.25
Power Factor	50%	0.41	0.48	0.45
I OWEI Facior	75%	0.52	0.60	0.56
	100%	0.61	0.70	0.66

Non drive end Drive end Foundation loads

Bearing type 6203 ZZ 6202 ZZ Max. traction : 25 lb Sealing Without Without Max. compression : 42 lb

Bearing Seal Bearing Seal

Lubrication interval Lubricant amount

Mobil Polyrex EM Lubricant type

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.

(1)/10/00/00/10	in load.					
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## TORQUE AND CURRENT VS SPEED CURVE

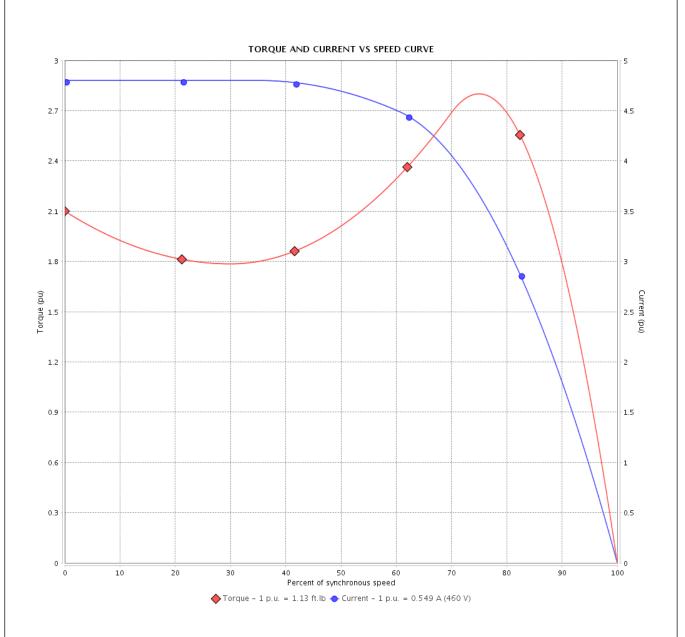
# Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12808928

Catalog #: .2512OT3E56C-S



Performance	: 208-230/460 V 60 Hz 6P		
Rated current LRC	: 1.21-1.10/0.549 A : 4.8	Moment of inertia (J) Duty cycle	: 0.0622 sq.ft.lb : Cont.(S1)
Rated torque Locked rotor torque	: 1.13 ft.lb : 210 %	Insulation class Service factor	: F
Breakdown torque Rated speed	: 280 % : 1160 rpm	Temperature rise	: 80 K

Locked rotor time : 72s (cold) 40s (hot)

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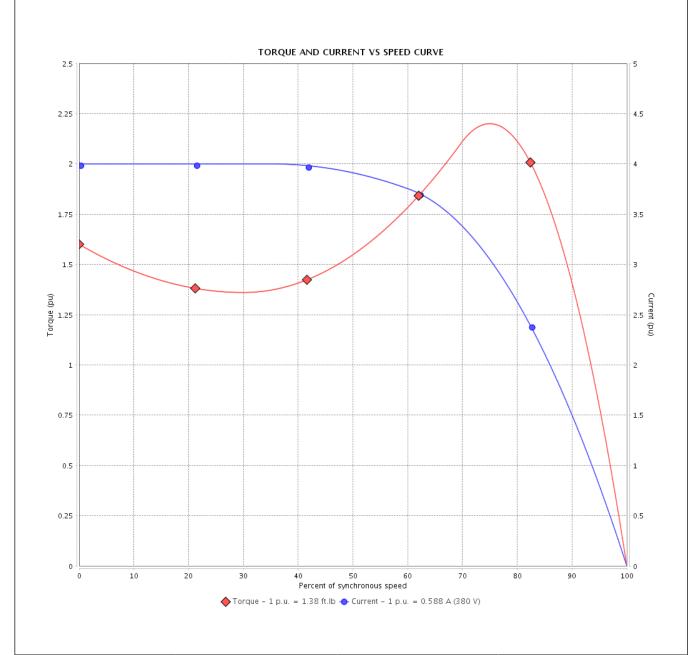
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 12808928

Catalog #: .2512OT3E56C-S



Performance : 190/380 V 50 Hz 6P Rated current : 1.18/0.588 A Moment of inertia (J) : 0.0622 sq.ft.lb **LRC** : 4.0 Duty cycle : Cont.(S1) Rated torque : 1.38 ft.lb Insulation class : F : 160 % Service factor Locked rotor torque : 1.35 Breakdown torque : 220 % Temperature rise : 80 K Rated speed : 950 rpm

Locked rotor time : 82s (cold) 46s (hot)

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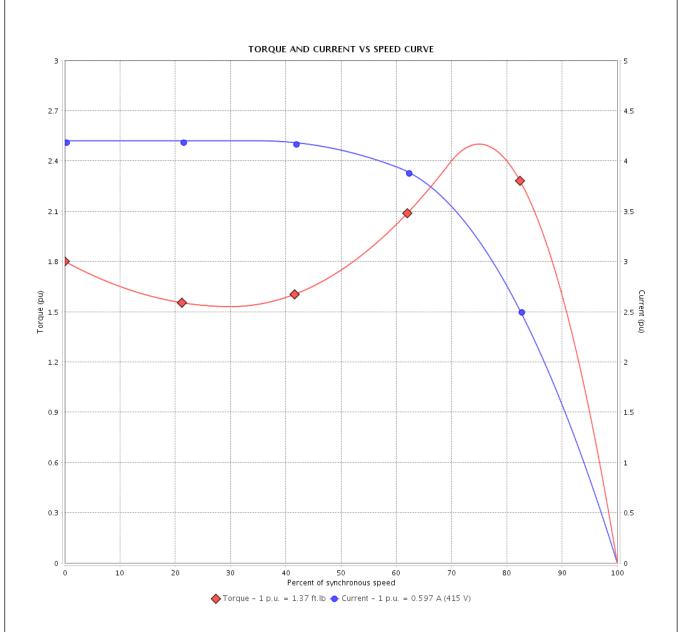
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Performance : 220/415 V 50 Hz 6P Rated current : 1.13/0.597 A Moment of inertia (J) : 0.0622 sq.ft.lb **LRC** : 4.2 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 1.37 ft.lb Service factor Locked rotor torque : 180 % : 1.35 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 955 rpm

Locked rotor time : 73s (cold) 41s (hot)

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# LOAD PERFORMANCE CURVE

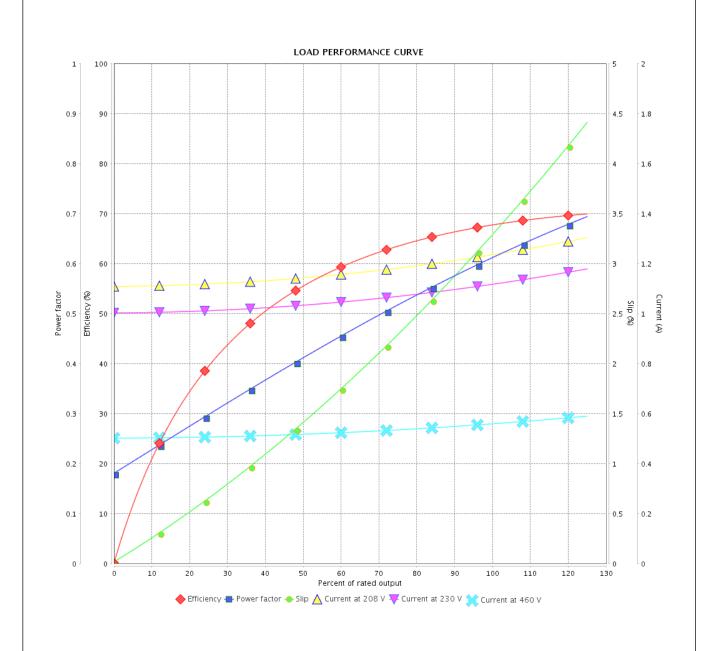
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Performance : 208-230/460 V 60 Hz 6P : 1.21-1.10/0.549 A Rated current Moment of inertia (J) : 0.0622 sq.ft.lb **LRC** : 4.8 Duty cycle : Cont.(S1) Insulation class Rated torque : 1.13 ft.lb : F Locked rotor torque : 210 % Service factor Breakdown torque : 280 % Temperature rise : 80 K Rated speed : 1160 rpm

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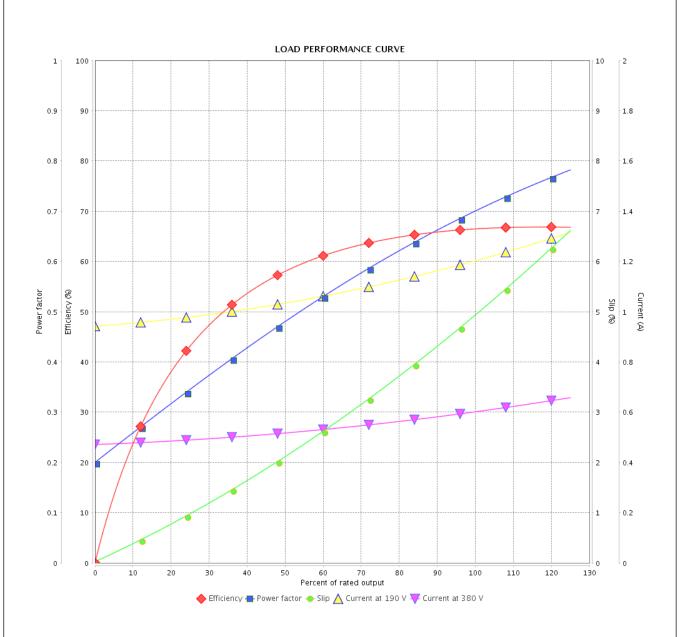
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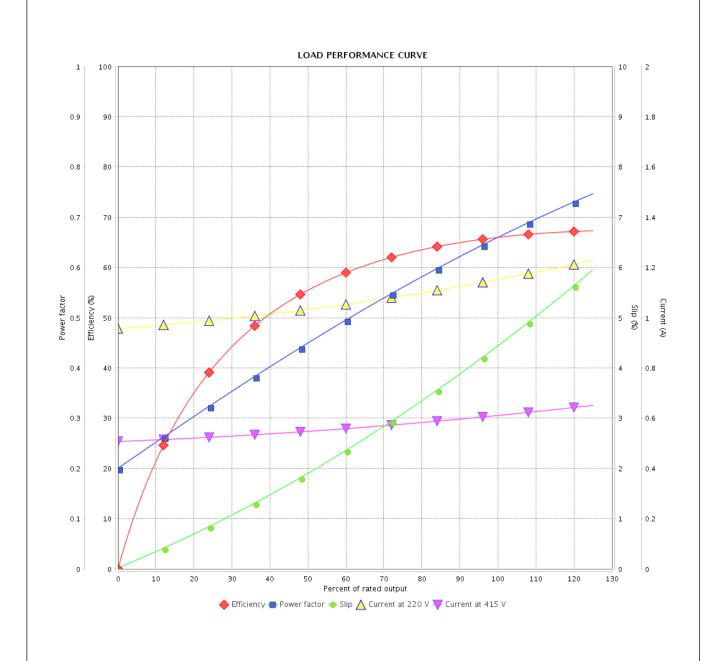
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# THERMAL LIMIT CURVE

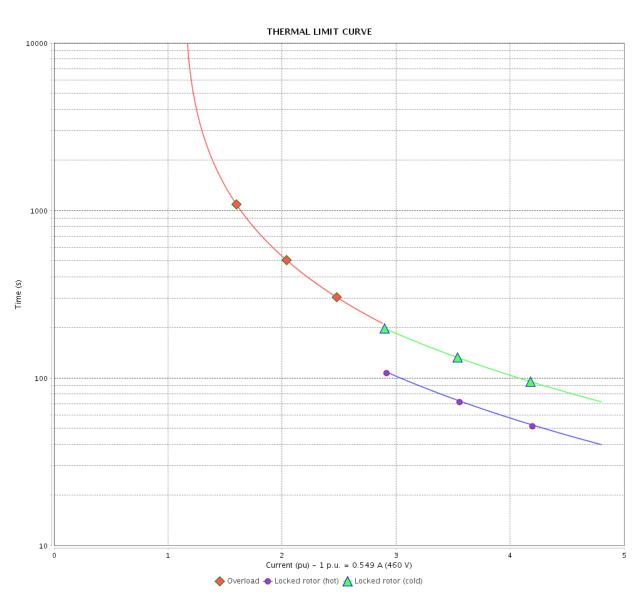
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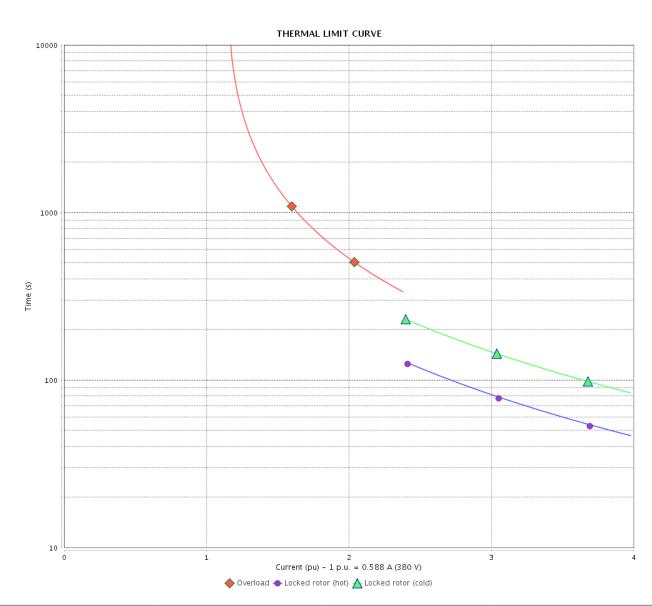
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Cooling constant

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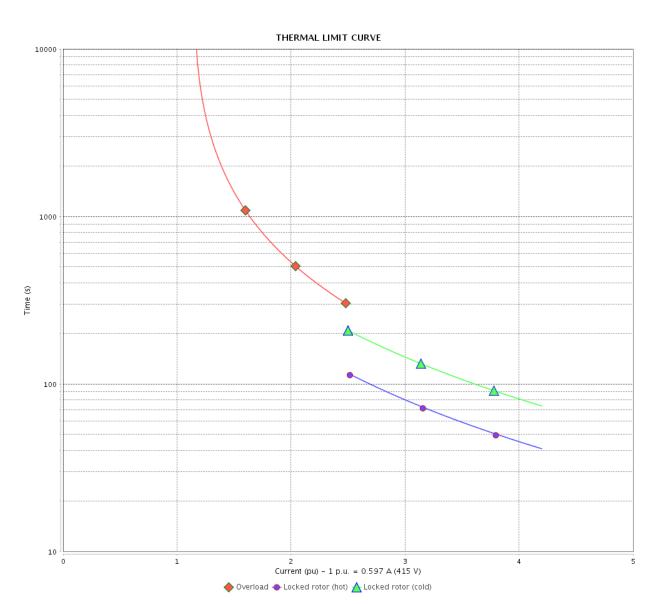
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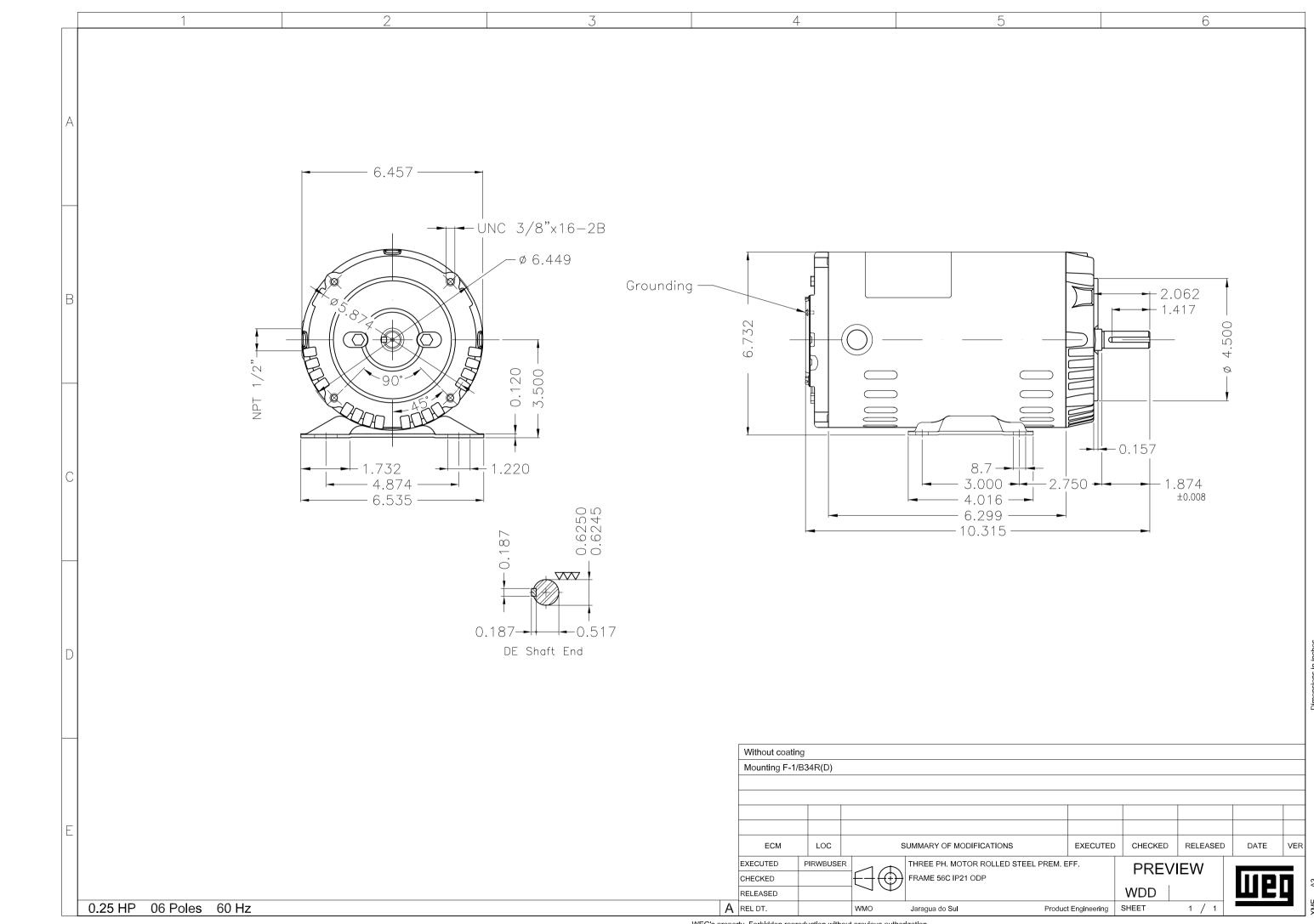
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IEC 60034-1 SF1.35

EFF 65.1% (IE3)

1.18-1.15/0.588-0.611A

ALTERNATE RATING: m.a.s.l.

1000

9.0 SF 1.35

190-220/380-415V

SF1.00

1.21A 67.5%

> USABLE @ 208V 3: 0.25HP 50Hz 950RPM

T2-WHT

11-BLU

91

T4-YEL

F3-ORG

15-BLK

TR-RED T6-GRY

T7-PNK

P-BRK RED

électrique grave. Déconnectez l'allmentation avant l'entretien de la machine

WARNING: Motor must be grounded in accordance with local and national

6202-ZZ

ODE

6203-ZZ

electrical codes to prevent serious electrical shocks. Disconnect power

AVERTISSEMENT: Le moteur doit être mis à la terre conformément aux codes électriques locaux et nationaux afin d'éviter tout choc

source before servicing unit.

MOBIL POLYREX EM

Inverter duty For 60Hz use on VPWM 1000:1 VT, 5:1 CT

INTERCHANGE ANY TWO LINE WIRES TO REVERSE THE ROTATION

9

ENCL

40°C CONT 1160 CODE

80K AMB

SFA 1.49/0.741 1.10/0.549

EFF

AVG. F.L. INS CL F AT

DES

PUTY RPM

9

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0.25(0.18)

HP(kW)

**56C** 

PH 3

230/460 Œ

MODEL .25120T3E56C-S

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