DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14797787

Catalog #: 00118ET3E56-S

Frame : 56 Cooling method : IC411 - TEFC

Insulation class : F Mounting : F-1
Duty cycle : Cont.(S1) Rotation¹ : Both (CW and CCW)

Ambient temperature : -20°C to +40°C Starting method : Direct On Line

Altitude : 1000 m.a.s.l. Approx. weight³ : 36.8 lb

Protection degree : IP55 Moment of inertia (J) : 0.1232 sq.ft.lb Design : B

		. 5		
Output [HP]		1	1	1
Poles		4	4	4
Frequency [Hz]		60	50	50
Rated voltage [V]		230/460	190/380	220/415
Rated current [A]		2.94/1.47	3.40/1.70	3.09/1.64
L. R. Amperes [A]		25.3/12.6	22.1/11.0	22.0/11.6
LRC [A]		8.6x(Code M)	6.5x(Code J)	7.1x(Code K)
No load current [A	.]	1.78/0.890	1.76/0.879	1.77/0.938
Rated speed [RPI	Л]	1765	1450	1455
Slip [%]		1.94	3.33	3.00
Rated torque [ft.lb]		2.98	3.62	3.61
Locked rotor torqu		280	200	220
Breakdown torque	: [%]	300	270	300
Service factor			1.00	1.00
Temperature rise		80 K	80 K	80 K
Locked rotor time		34s (cold) 19s (hot)	32s (cold) 18s (hot)	30s (cold) 17s (hot)
Noise level ²		52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
	25%	81.0	82.5	81.2
Efficiency (%)	50%	82.5	82.2	81.5
Efficiency (%)	75%	84.0	83.7	83.6
	100%	85.5	82.9	83.5
Power Factor	25%	0.30	0.36	0.33
	50%	0.52	0.62	0.58
1 OWET I ACIOI	75%	0.66	0.74	0.71
	100%	0.75	0.81	0.79

<u>Drive end</u> <u>Non drive end</u> Foundation loads

Bearing type : 6204 ZZ 6202 ZZ Max. traction : 88 lb Sealing : V'Ring Without Max. compression : 125 lb

Bearing Seal

Lubrication interval : - - Lubricant amount : - Lubricant type : Mobil Polyrex EM

Notes

USABLE @208V 3.25A SF 1.00 SFA 3.25A

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

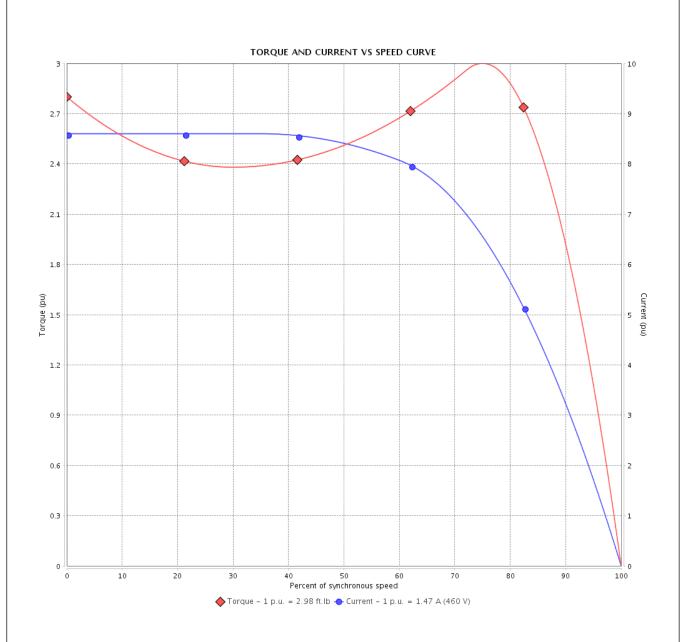
Three Phase Induction Motor - Squirrel Cage



Customer	:	
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Product line : Premium Efficiency Three-Phase Product code : 14797787

Catalog #: 00118ET3E56-S



Performance : 230/460 V 60 Hz 4P Rated current : 2.94/1.47 A Moment of inertia (J) : 0.1232 sq.ft.lb **LRC** : 8.6 Duty cycle : Cont.(S1) : F Insulation class Rated torque : 2.98 ft.lb Service factor Locked rotor torque : 280 % : 80 K Breakdown torque : 300 % Temperature rise Rated speed : 1765 rpm Design : B

Locked rotor time : 34s (cold) 19s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

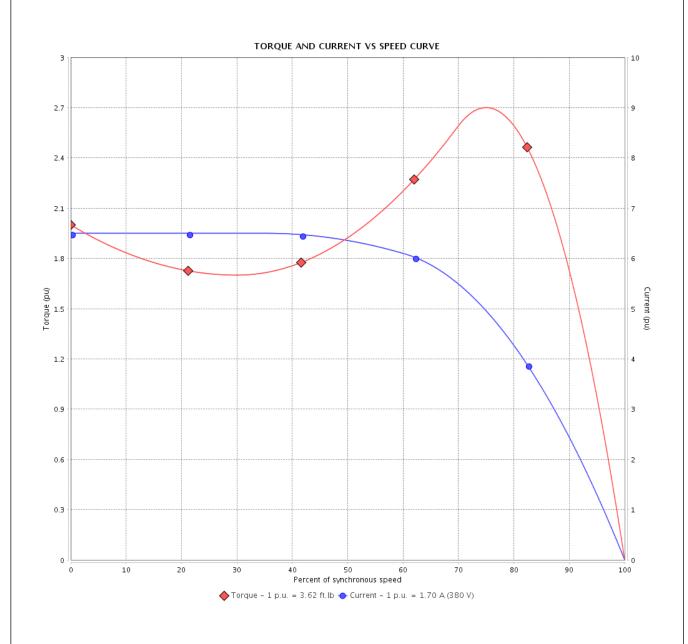
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14797787

Catalog # : 00118ET3E56-S



Performance : 190/380 V 50 Hz 4P Rated current : 3.40/1.70 A Moment of inertia (J) : 0.1232 sq.ft.lb **LRC** : 6.5 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 3.62 ft.lb : 200 % : 1.00 Locked rotor torque Service factor : 80 K Breakdown torque : 270 % Temperature rise : B Rated speed : 1450 rpm Design

Locked rotor time : 32s (cold) 18s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

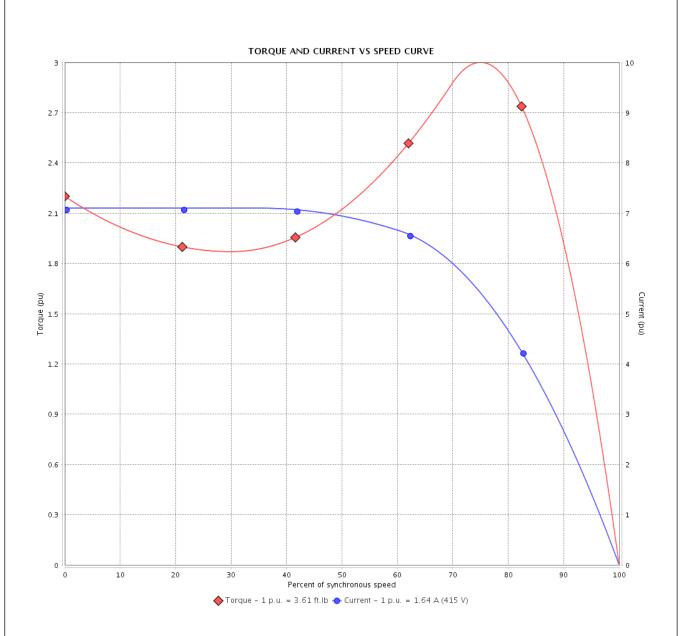
Three Phase Induction Motor - Squirrel Cage



Customer			
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Product line : Premium Efficiency Three-Phase Product code : 14797787

Catalog #: 00118ET3E56-S



Performance : 220/415 V 50 Hz 4P

Rated current : 3.09/1.64 A Moment of inertia (J) : 0.1232 sq.ft.lb LRC : 7.1 Duty cycle : Cont.(S1)

: F Insulation class Rated torque : 3.61 ft.lb Service factor Locked rotor torque : 220 % : 1.00 Breakdown torque : 300 % Temperature rise : 80 K Rated speed : B : 1455 rpm Design

Locked rotor time : 30s (cold) 17s (hot)

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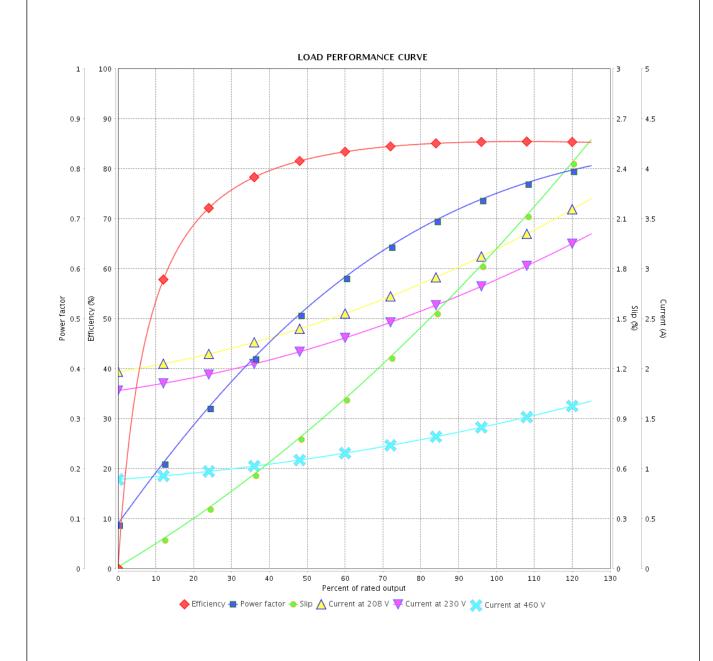
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer

Product line : Premium Efficiency Three-Phase Product code : 14797787



Performance	: 2	230/460 V 60 Hz 4P				
Rated current	: 2	2.94/1.47 A	Moment o	f inertia (J)	: 0.1232 sq.ft.lb	
LRC	: 8	3.6	Duty cycle	}	: Cont.(S1)	
Rated torque	: 2	2.98 ft.lb	Insulation	class	: F	
Locked rotor torqu	ue : 2	280 %	Service fa	ctor	:	
Breakdown torque	e :3	300 %	6 Temperature rise		: 80 K	
Rated speed	: 1	1765 rpm	Design		: B	
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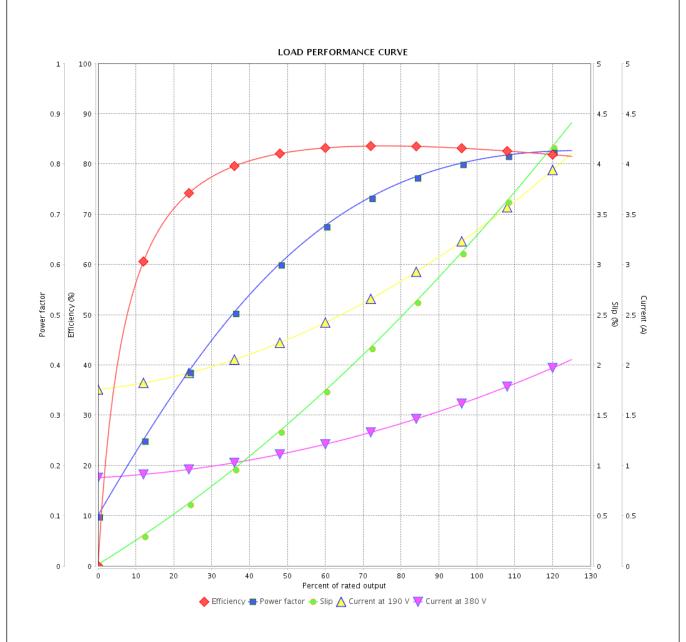
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Product line : Premium Efficiency Three-Phase Product code : 14797787

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Performance : 190/380 V 50 Hz 4P : 3.40/1.70 A Moment of inertia (J) : 0.1232 sq.ft.lb Rated current **LRC** : Cont.(S1) : 6.5 Duty cycle Insulation class : 3.62 ft.lb : F Rated torque Locked rotor torque : 200 % Service factor : 1.00 Breakdown torque : 270 % Temperature rise : 80 K Design Rated speed : 1450 rpm : B D ----Changes Summary Ob a alice d

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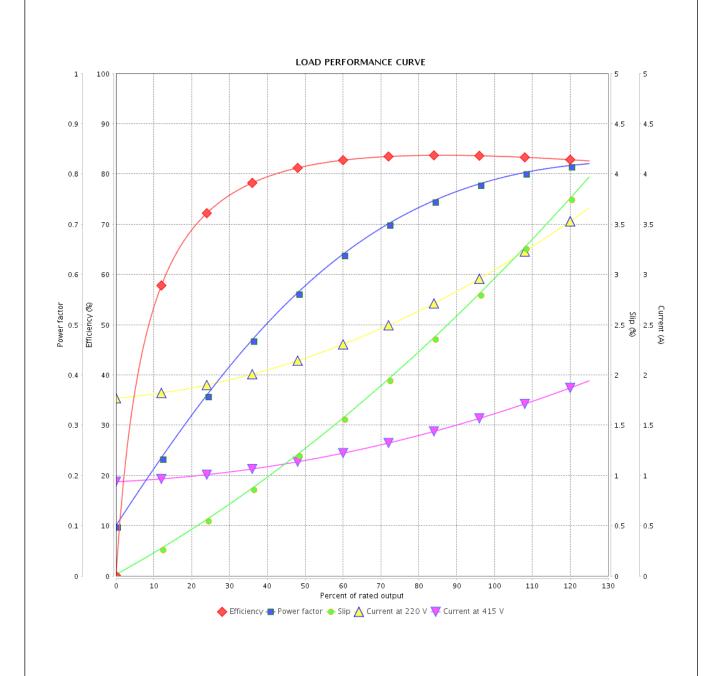
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Three Phase Induction Motor - Squirrel Cage



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Performance		: 220/415 V 50 Hz 4	Р			
Rated current LRC		: 3.09/1.64 A : 7.1	l l	Moment of inertia (J)		.lb
Rated torque		: 3.61 ft.lb	1 ,	Duty cycle Insulation class		
Locked rotor tord		: 220 %	Service fa		: 1.00	
Breakdown torqu	ie	: 300 %	Temperat	ure rise	: 80 K	
Rated speed		: 1455 rpm Design			: B	
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THERMAL LIMIT CURVE

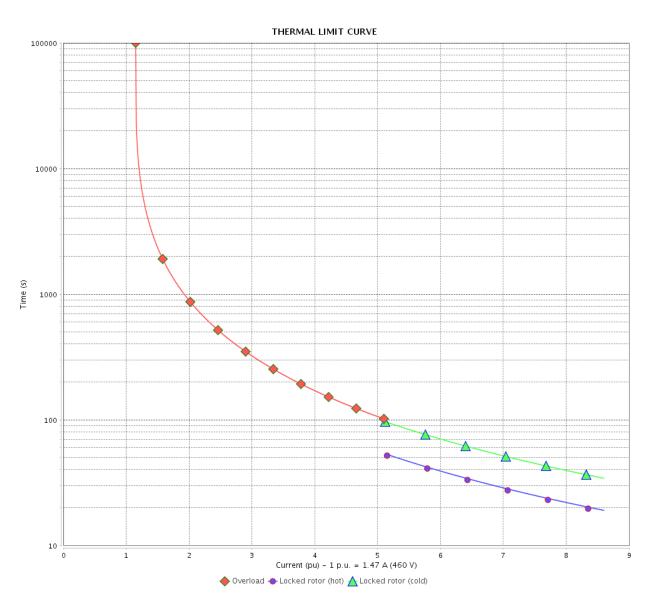
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Product line : Premium Efficiency Three-Phase Product code : 14797787

Catalog #: 00118ET3E56-S



Performance : 230/460 V 60 Hz 4P : 2.94/1.47 A Moment of inertia (J) : 0.1232 sq.ft.lb Rated current **LRC** Duty cycle : Cont.(S1) : 8.6 : 2.98 ft.lb Insulation class : F Rated torque Locked rotor torque : 280 % Service factor : 300 % : 80 K Breakdown torque Temperature rise Rated speed Design : 1765 rpm Heating constant Cooling constant

Cooling Constant					
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THERMAL LIMIT CURVE

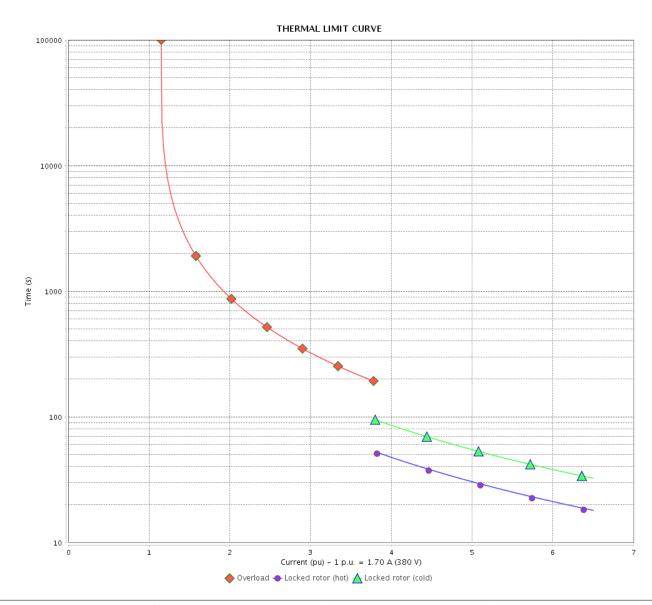
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Cooling constant	l .				
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THERMAL LIMIT CURVE

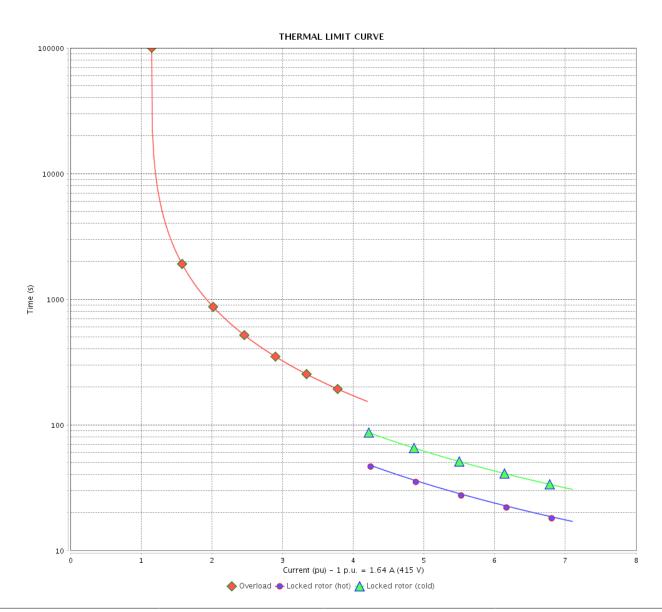
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Cooling constant

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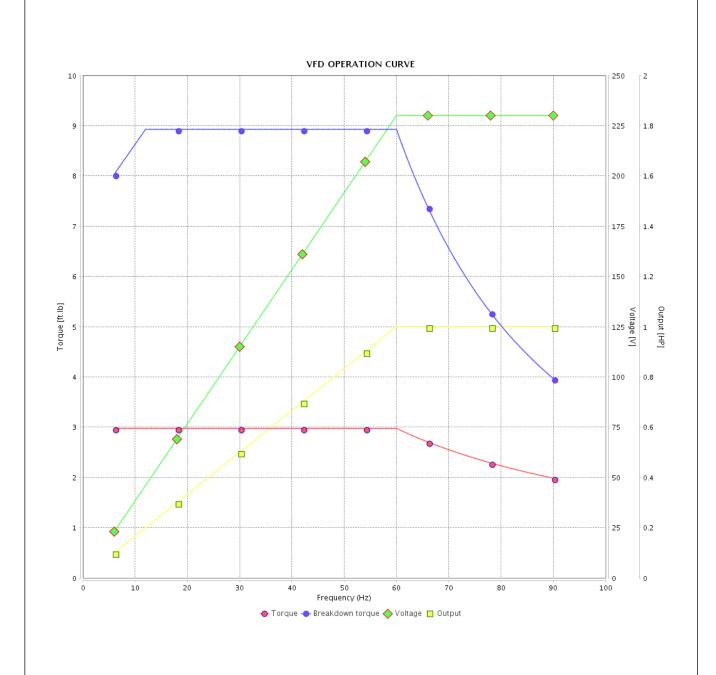
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : Premium Efficiency Three-Phase Product code : 14797787



Performance	: 230/460 V 60 Hz 4P				
Rated current	: 2.94/1.47 A	Moment of inertia (J)		: 0.1232 sq.ft.lb	
LRC	: 8.6	Duty cycle		: Cont.(S1)	
Rated torque	: 2.98 ft.lb	Insulation class		:F	
Locked rotor torque	: 280 %	Service factor		:	
Breakdown torque	: 300 %	Temperature rise		: 80 K	
Rated speed	: 1765 rpm	Design		: B	
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

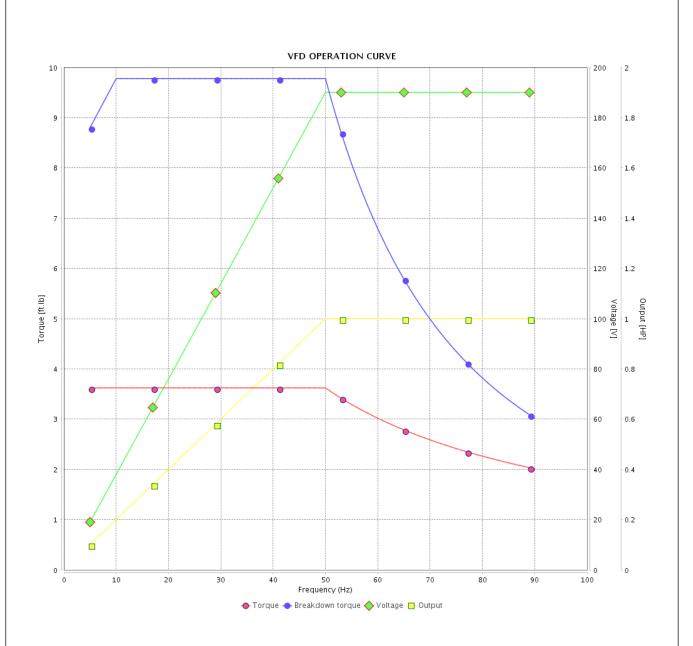
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Product line : Premium Efficiency Three-Phase Product code : 14797787

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Performance		: 190/380 V 50 Hz	: 4P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed		: 3.40/1.70 A : 6.5 : 3.62 ft.lb : 200 % : 270 % : 1450 rpm	Duty cy Insulati Service Tempe	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		b
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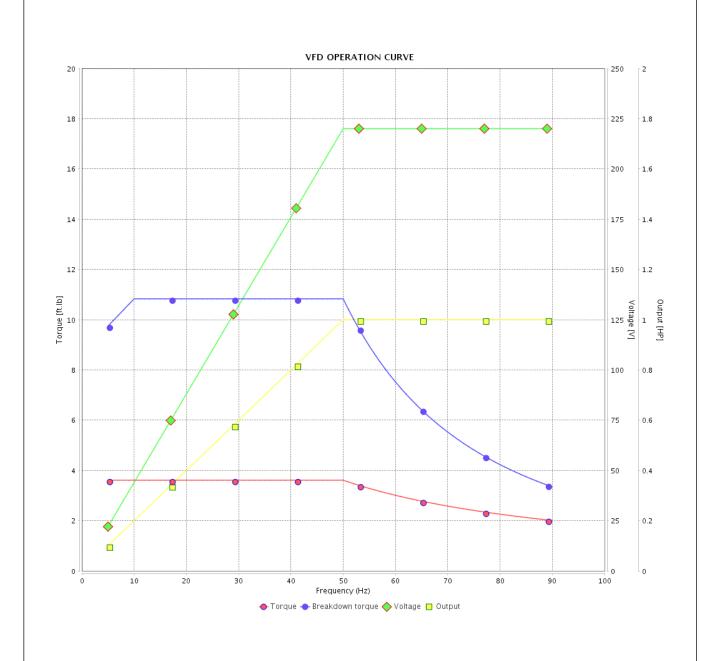
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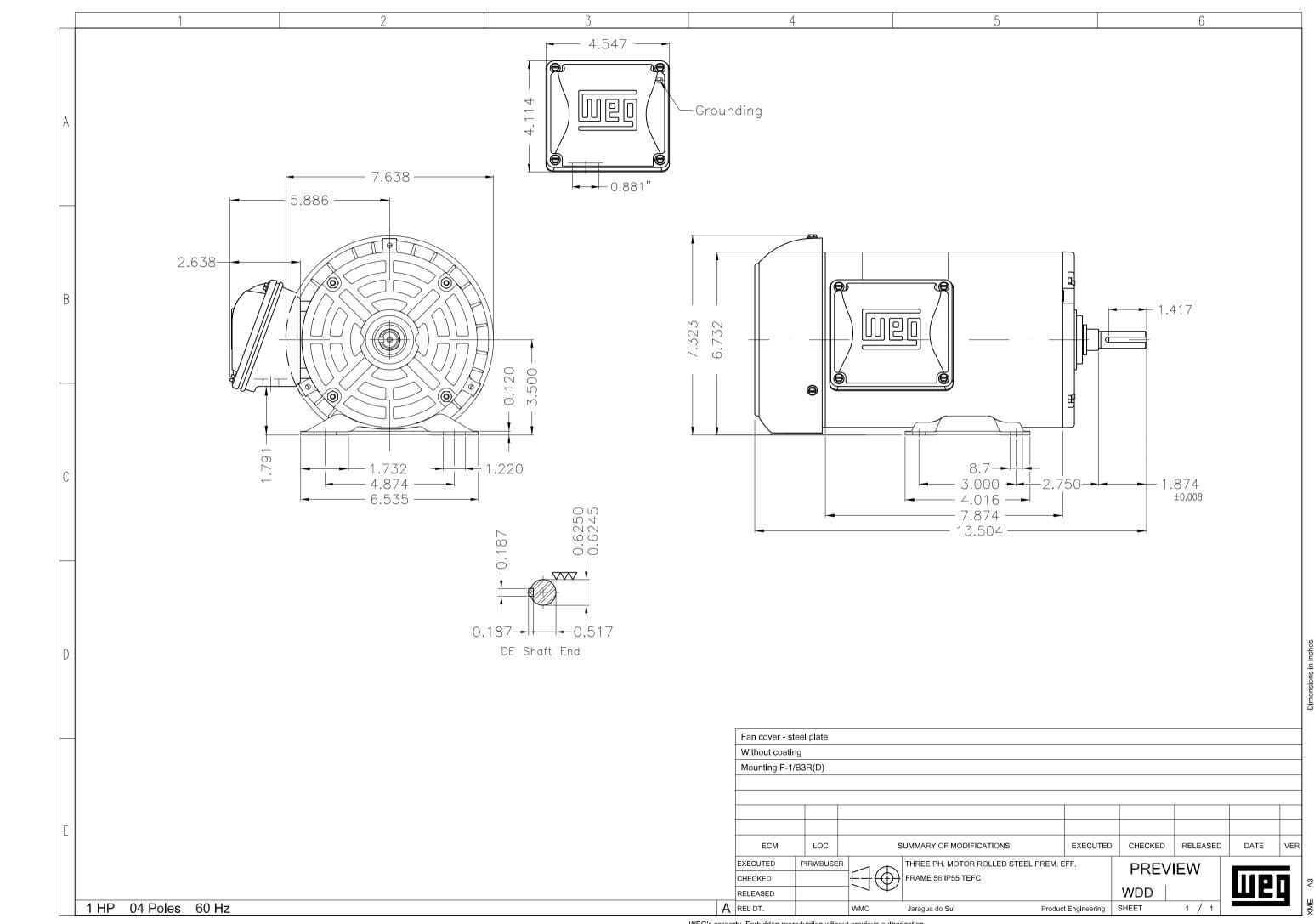


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Performance	:	220/415 V 50 Hz 4P					
Rated current	:	3.09/1.64 A	Moment o	Moment of inertia (J)		: 0.1232 sq.ft.lb	
LRC	:	7.1	Duty cycle	Duty cycle		: Cont.(S1)	
Rated torque	:	3.61 ft.lb	Insulation class		:F		
Locked rotor torque	e :	220 %	Service factor		: 1.00		
Breakdown torque		300 %	Temperature rise		: 80 K		
Rated speed	:	1455 rpm	om Design		: B		
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FOR SAFE AREA

3PT9

Energy Verifi

MODEL 00118ET3E56-S ë B NO1.TEOICOXOX 3APR2022

14797787

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

2

8

P55 CODE SH F AT 80K TEFC 2°04

3.38/1.69

1.15

2.94/1.47 230/460

1000 m.a.s.l

NSC

CONT

26

1.0HP SABLE @ 208V 3.25A ALTERNATE RATING:

SF1.00 INC. W

3.40-3.06/1.70-1.62A

For safe area-inverter duty motor For 60Hz use on VPWM 1000:1 VT. 5:1 CT 8202-ZZ 9 ODE 2

8204-ZZ

牌

MOBIL POLYREX EM

IEC 60034-1

SF1.00

190-220/380-415V

85.5%

NOM EFF 1450RPM

50 Hz

ZPM 3FA 냃 쌆

EFF 82.9%

T2-WHT

13-ORG 1-810 I7-PNK F5-BLK

T8-RED F6-GRY r4-YEL

T9-RRK RFD







choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine

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