

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : Rolled Steel NEMA Premium Efficiency Three-Phase Product code : 12677336
 Catalog # : 00536ET3ER184TC-S

Frame : 182/4TC	Cooling method : IC411 - TEFC
Insulation class : F	Mounting : W-6
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 ³ : 89.6 lb
Protection degree : IP55	Moment of inertia (J) : 0.2079 sq.ft.lb
Design : B	

Output [HP]	5	5	5
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190-220/380	415
Rated current [A]	11.8/5.90	14.3-12.4/7.17	6.59
L. R. Amperes [A]	92.0/46.0	91.8-79.3/45.9	50.7
LRC [A]	7.8x(Code J)	6.4x(Code G)	7.7x(Code J)
No load current [A]	4.40/2.20	4.34-3.75/2.17	2.45
Rated speed [RPM]	3500	2860	2885
Slip [%]	2.78	4.67	3.83
Rated torque [ft.lb]	7.50	9.18	9.10
Locked rotor torque [%]	220	180	220
Breakdown torque [%]	300	250	300
Service factor	1.15	1.00	1.00
Temperature rise	80 K	105 K	105 K
Locked rotor time	30s (cold) 17s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	68.0 dB(A)	65.0 dB(A)	65.0 dB(A)
Efficiency (%)	25%	87.2	89.8
	50%	87.5	88.1
	75%	88.5	87.3
	100%	88.5	85.2
Power Factor	25%	0.49	0.55
	50%	0.76	0.82
	75%	0.85	0.89
	100%	0.89	0.92

Bearing type	: Drive end	6206 ZZ	Non drive end	6205 ZZ	Foundation loads	Max. traction	: 129 lb
	: Sealing	V'Ring	Without	Bearing Seal		Max. compression	: 219 lb
Lubrication interval	: -	-	-	-			
Lubricant amount	: -	-	-	-			
Lubricant type	: Mobil Polyrex EM						

Notes
 USABLE @208V 13.1A SF 1.00 SFA 13.1A

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



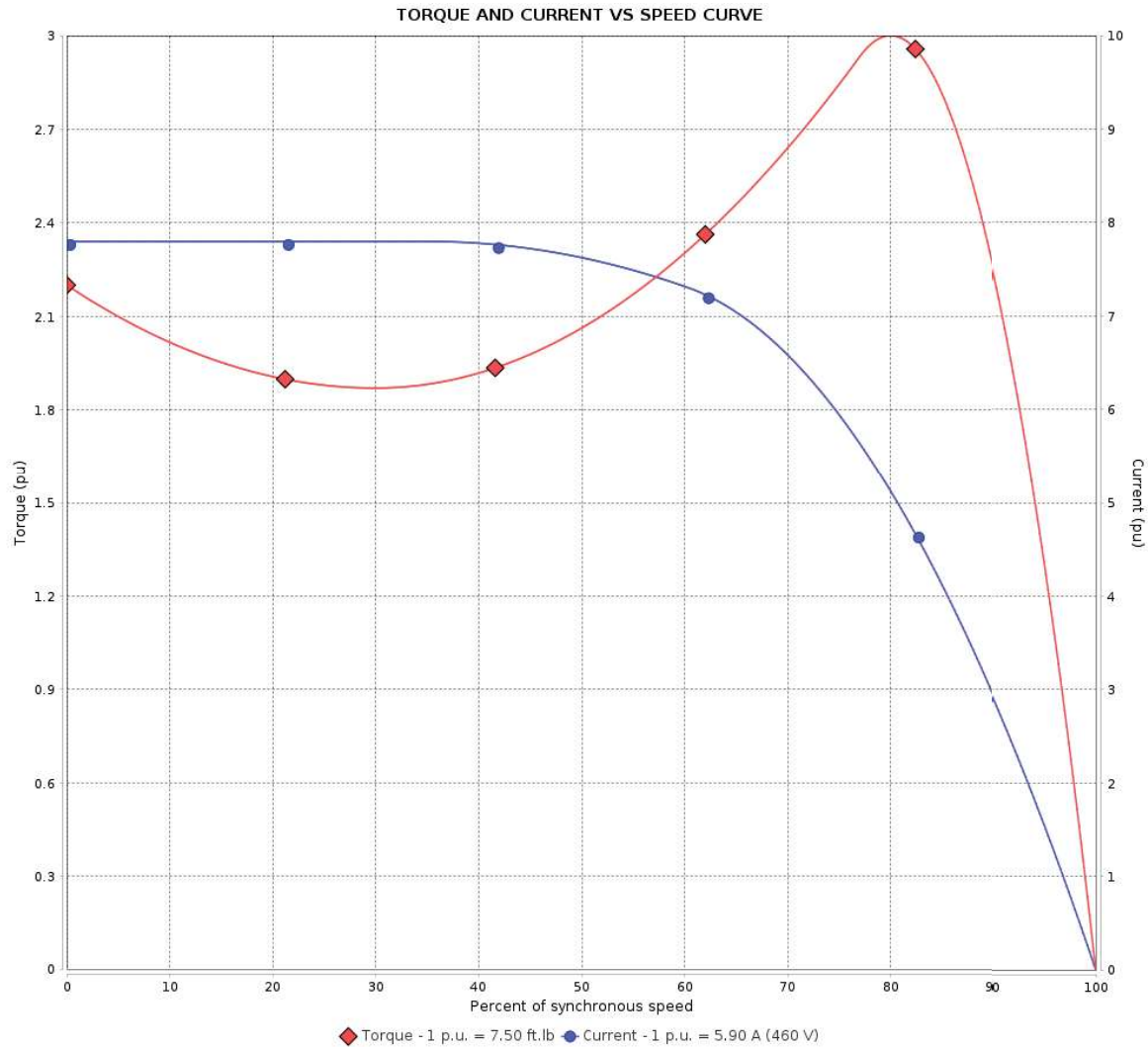
Three Phase Induction Motor - Squirrel Cage

Customer : _____

Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12677336

Catalog # : 00536ET3ER184TC-S



Performance : 230/460 V 60 Hz 2P

Rated current : 11.8/5.90 A
LRC : 7.8
Rated torque : 7.50 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 300 %
Rated speed : 3500 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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

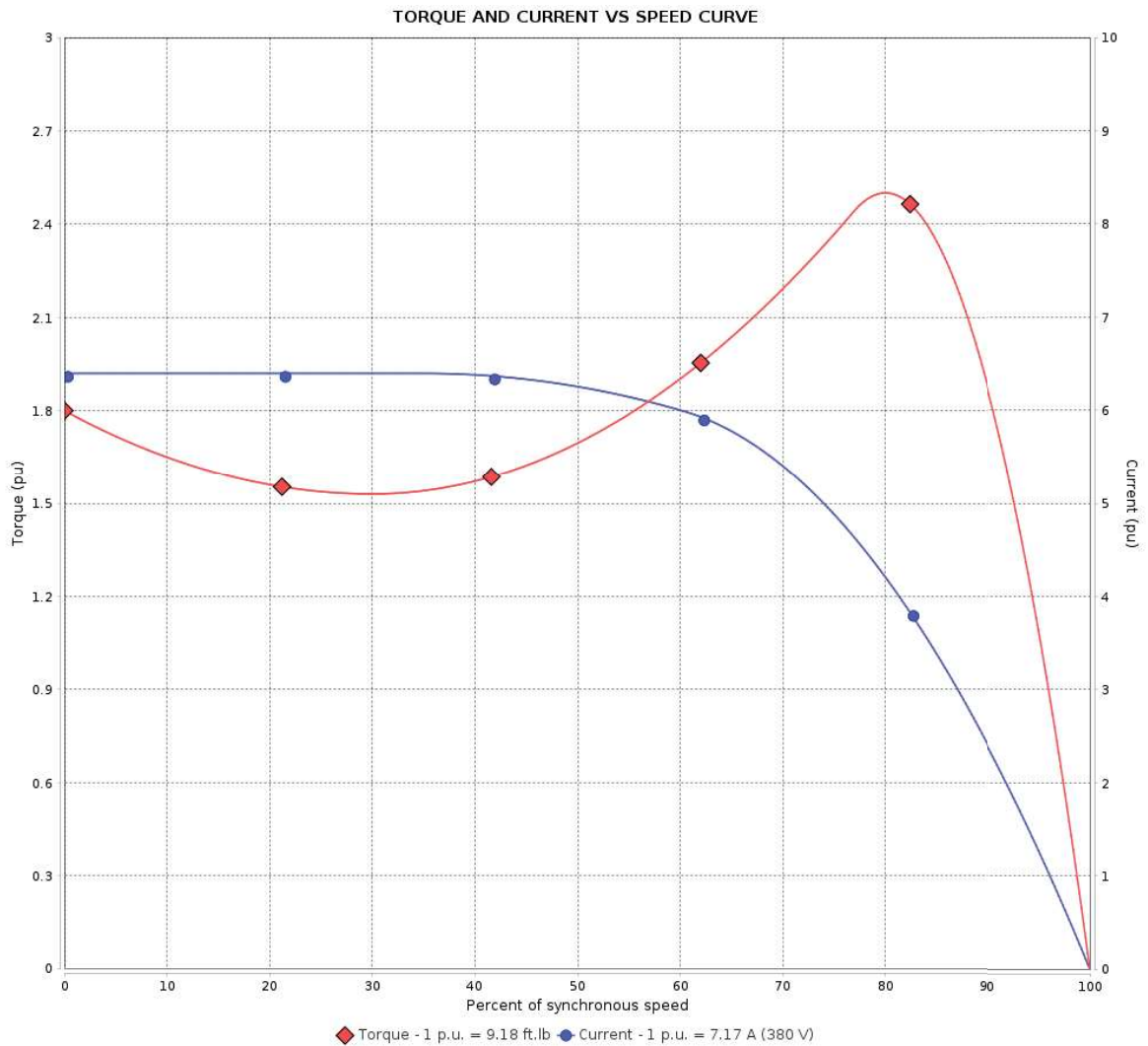
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TORQUE AND CURRENT VS SPEED CURVE



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		Catalog # : 00536ET3ER184TC-S



Performance	: 190-220/380 V 50 Hz 2P		
Rated current	: 14.3-12.4/7.17 A	Moment of inertia (J)	: 0.2079 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 9.18 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 2860 rpm	Design	: B

Locked rotor time : 0s (cold) 0s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



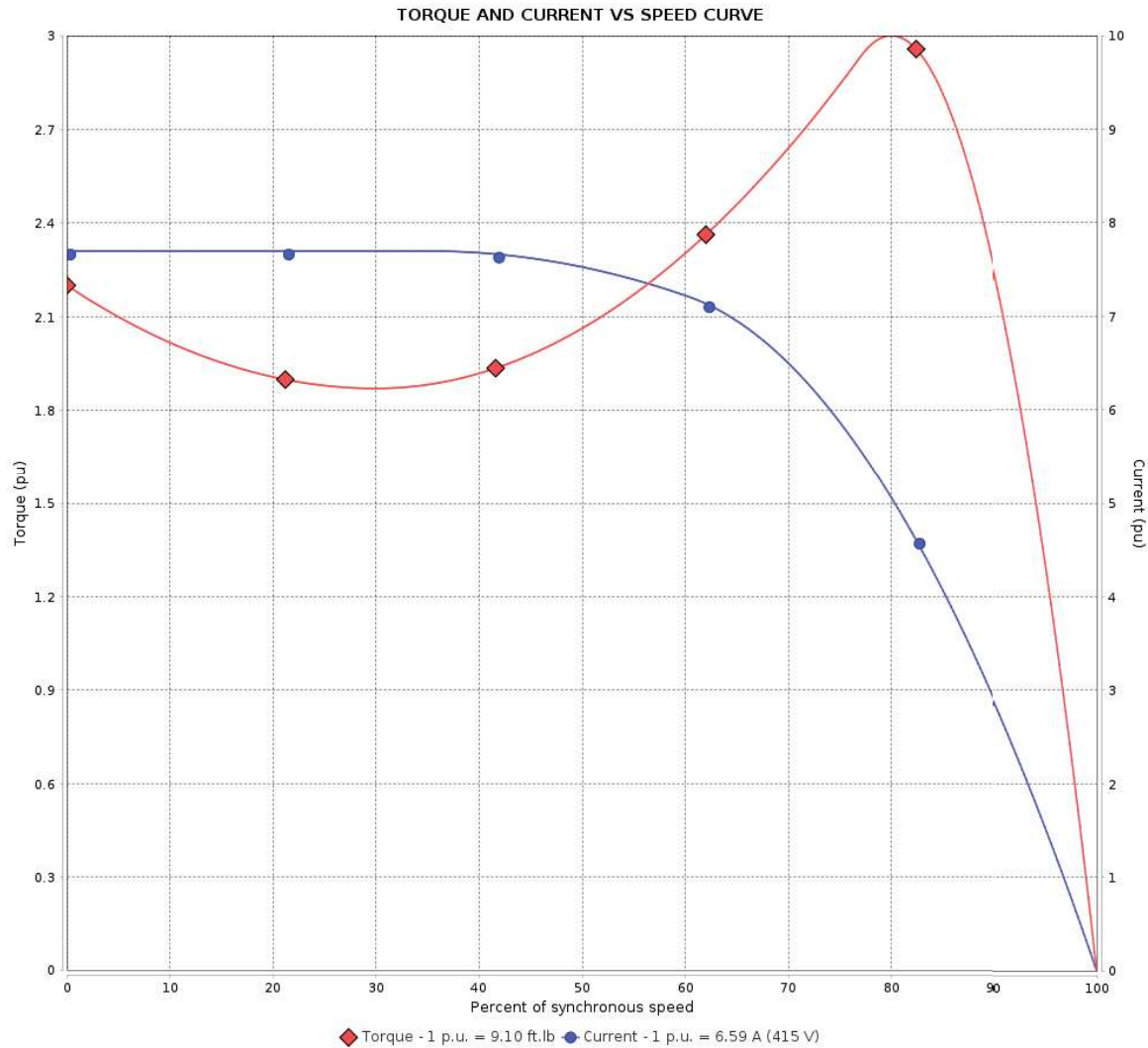
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Product line : Rolled Steel NEMA Premium Efficiency
Three-Phase

Product code : 12677336

Catalog # : 00536ET3ER184TC-S



Performance : 415 V 50 Hz 2P

Rated current : 6.59 A
LRC : 7.7
Rated torque : 9.10 ft.lb
Locked rotor torque : 220 %
Breakdown torque : 300 %
Rated speed : 2885 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Locked rotor time : 0s (cold) 0s (hot)

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LOAD PERFORMANCE CURVE



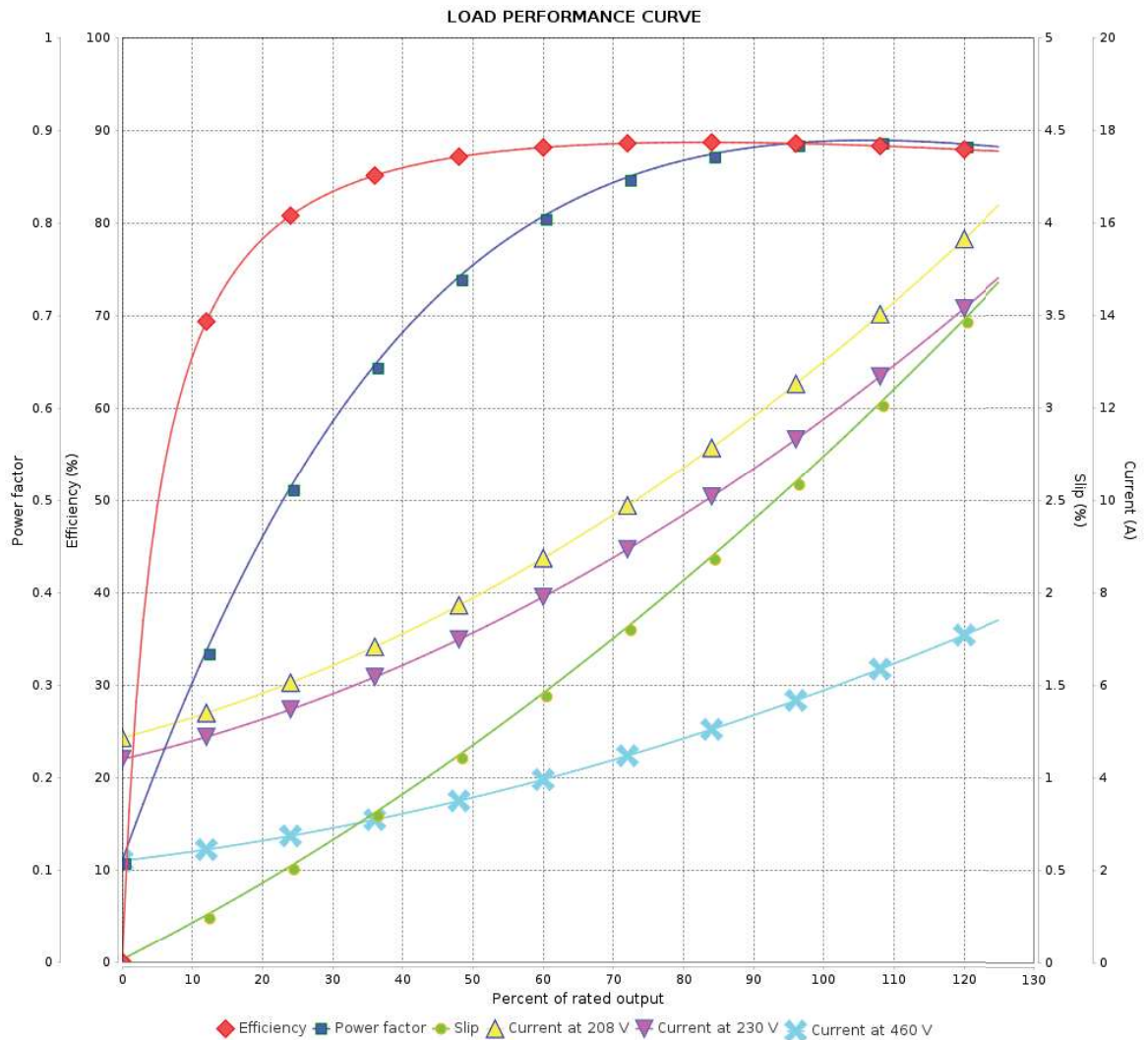
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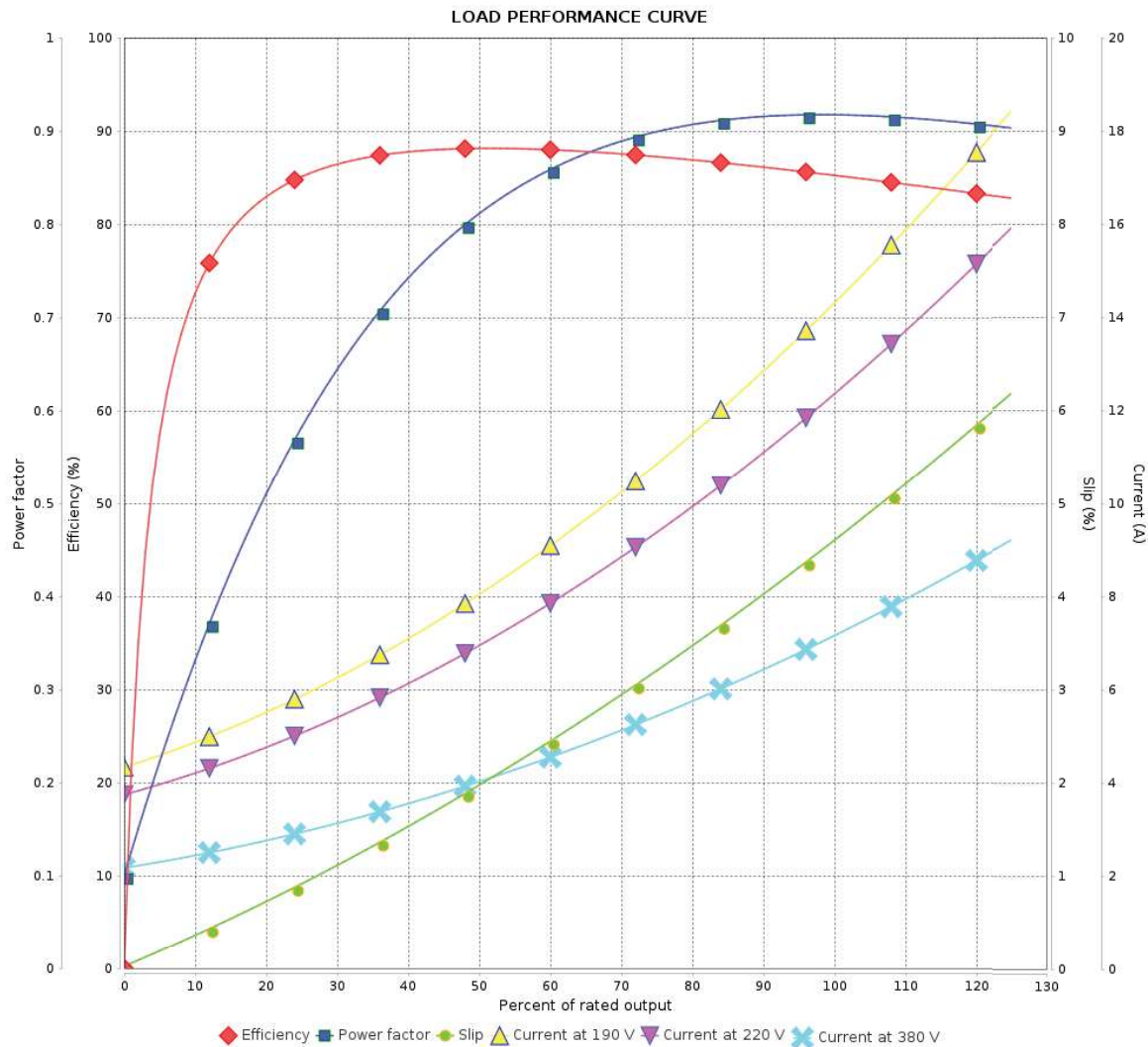
Three Phase Induction Motor - Squirrel Cage

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Product code : 12677336

Catalog # : 00536ET3ER184TC-S



Performance : 190-220/380 V 50 Hz 2P

Rated current	: 14.3-12.4/7.17 A	Moment of inertia (J)	: 0.2079 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 9.18 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 2860 rpm	Design	: B

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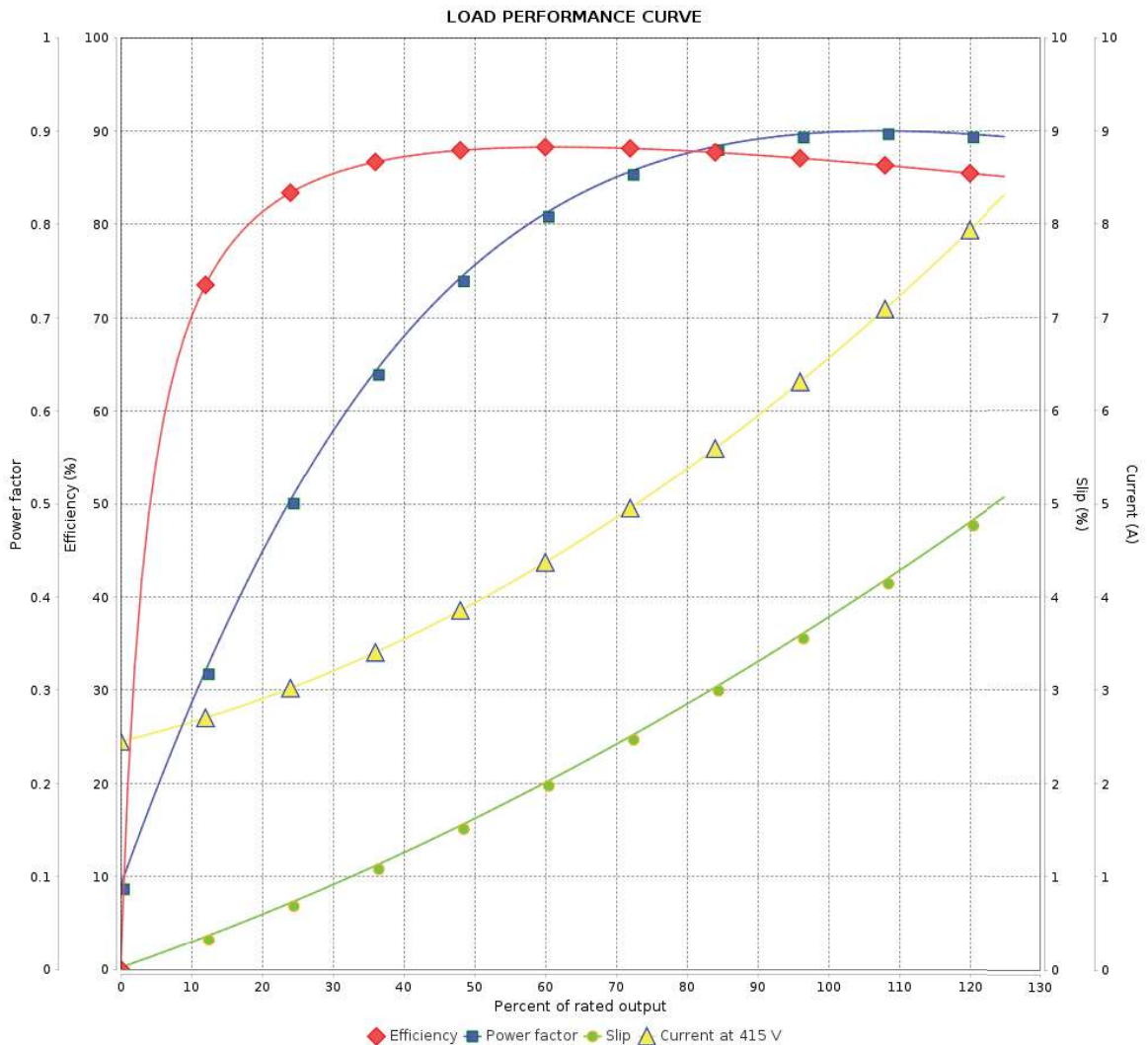
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THERMAL LIMIT CURVE



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Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

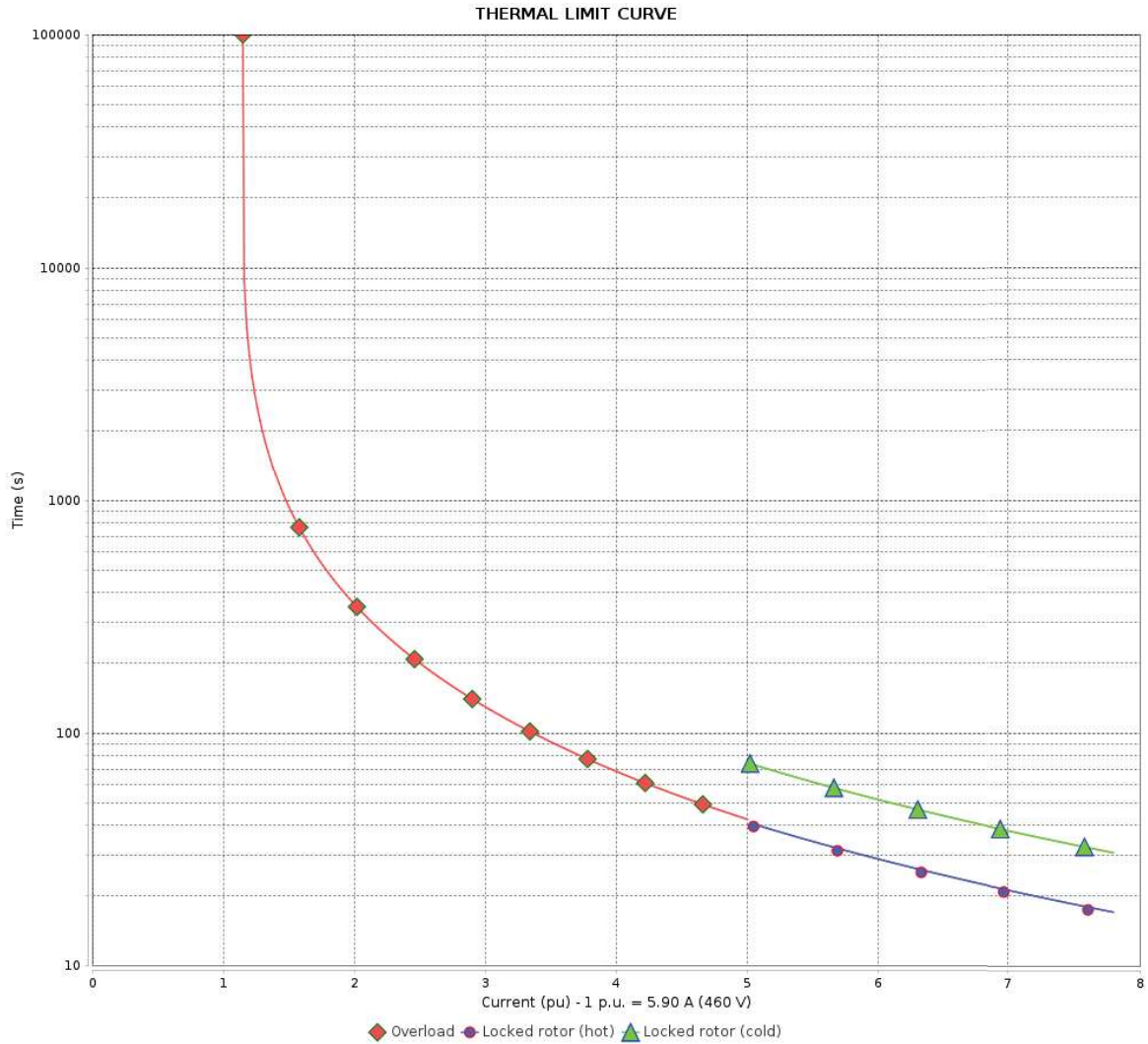
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Performance : 190-220/380 V 50 Hz 2P

Rated current : 14.3-12.4/7.17 A
LRC : 6.4
Rated torque : 9.18 ft.lb
Locked rotor torque : 180 %
Breakdown torque : 250 %
Rated speed : 2860 rpm

Moment of inertia (J) : 0.2079 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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Cooling constant

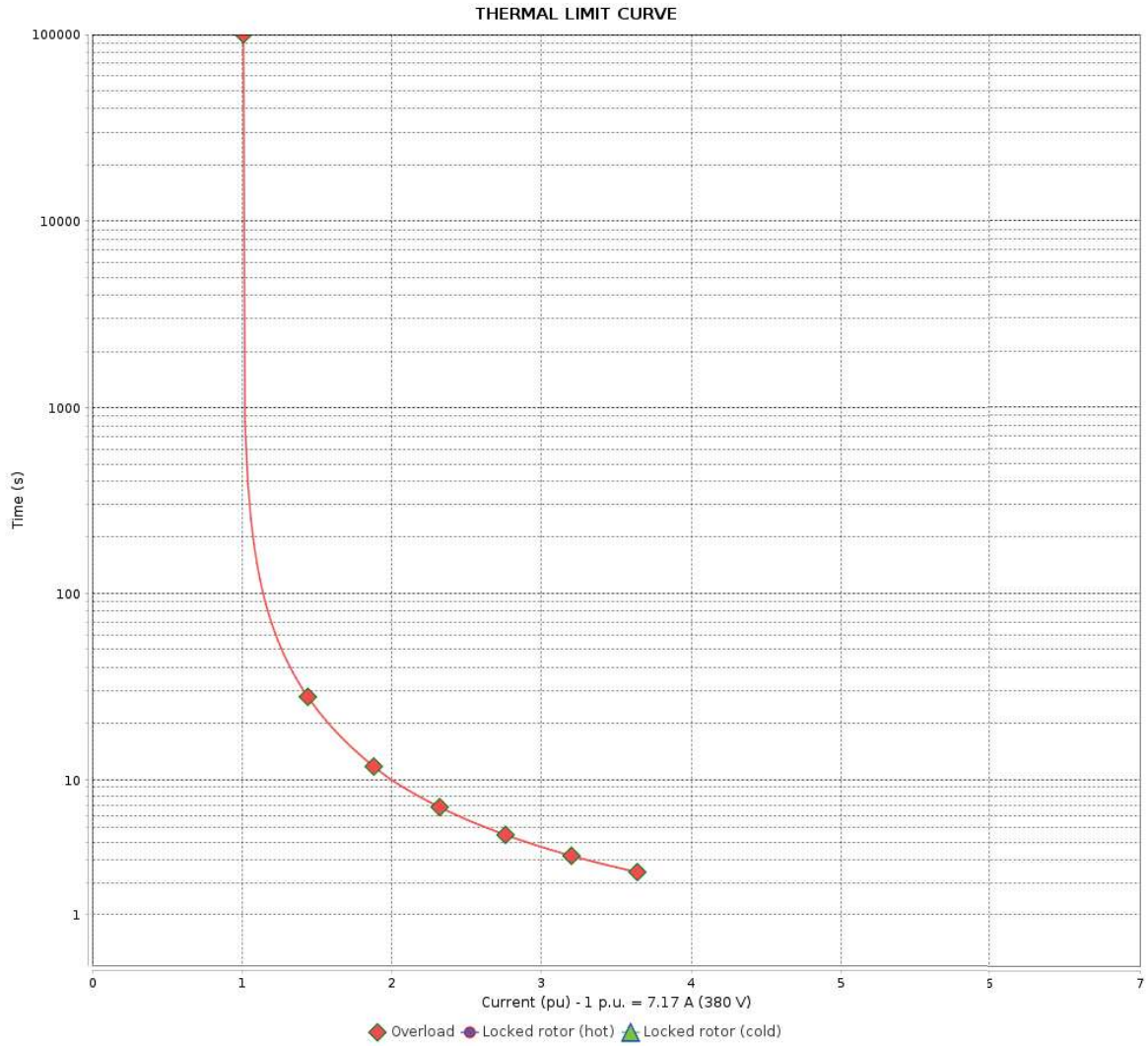
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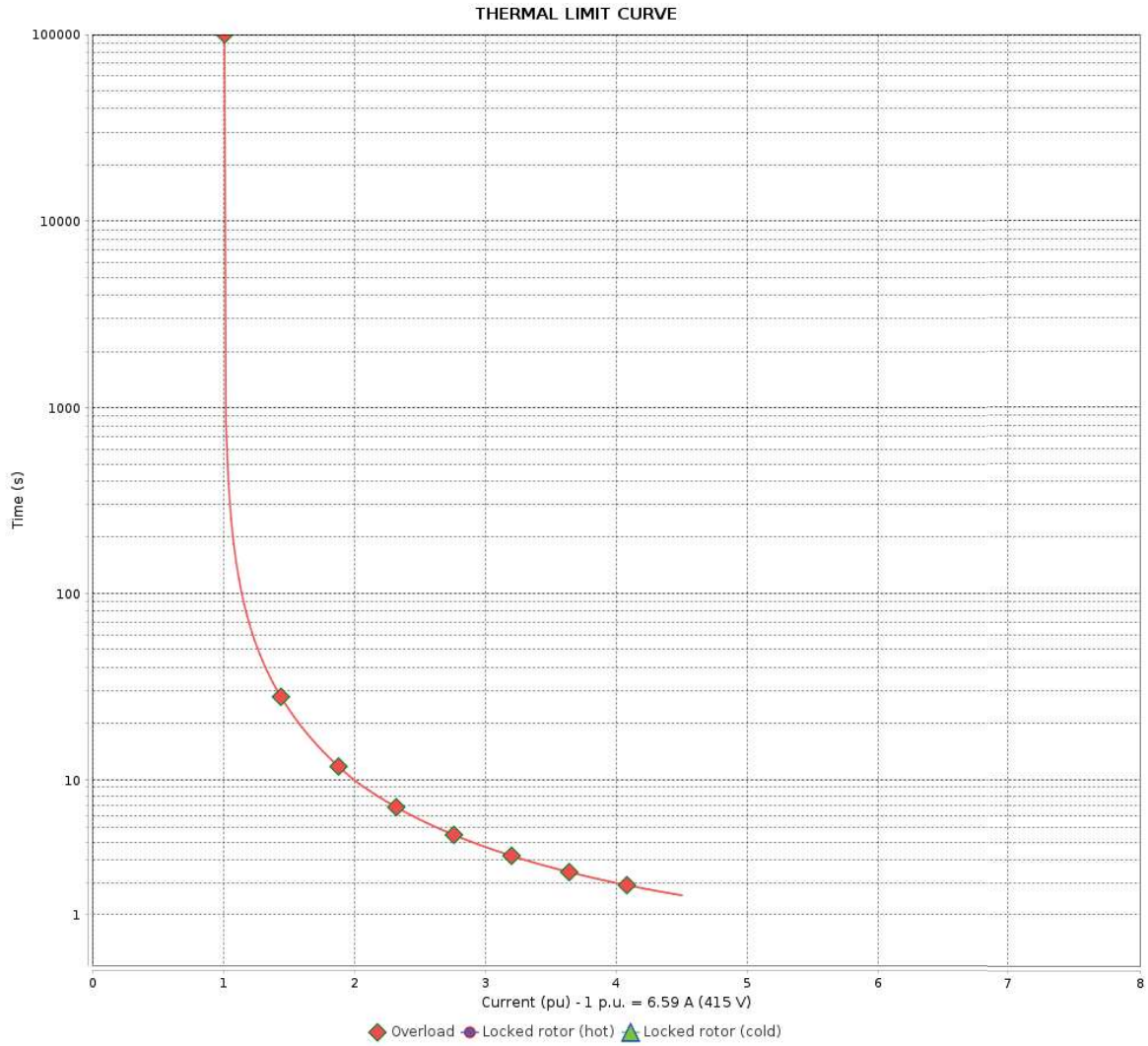
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Date				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

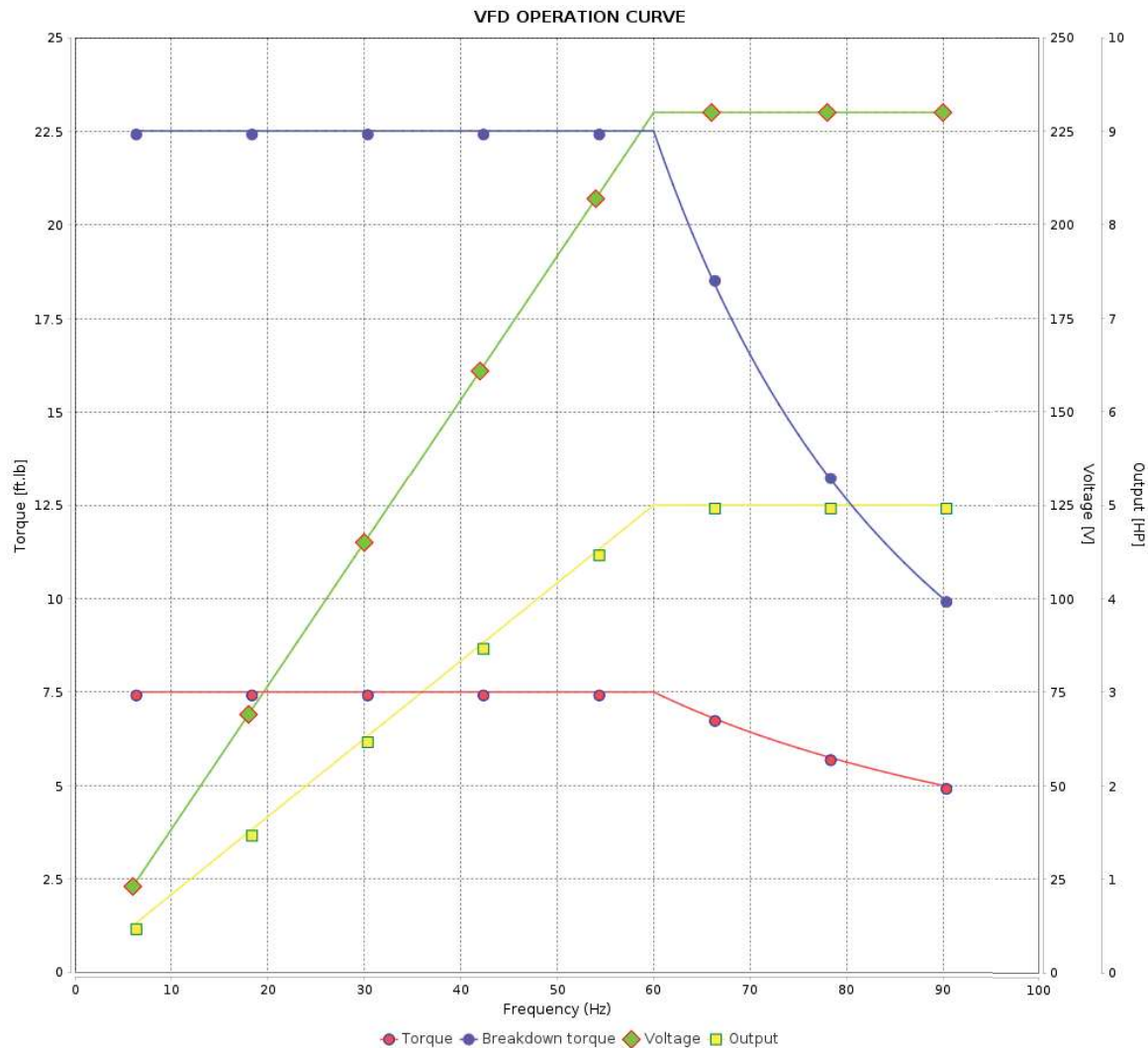


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VFD OPERATION CURVE



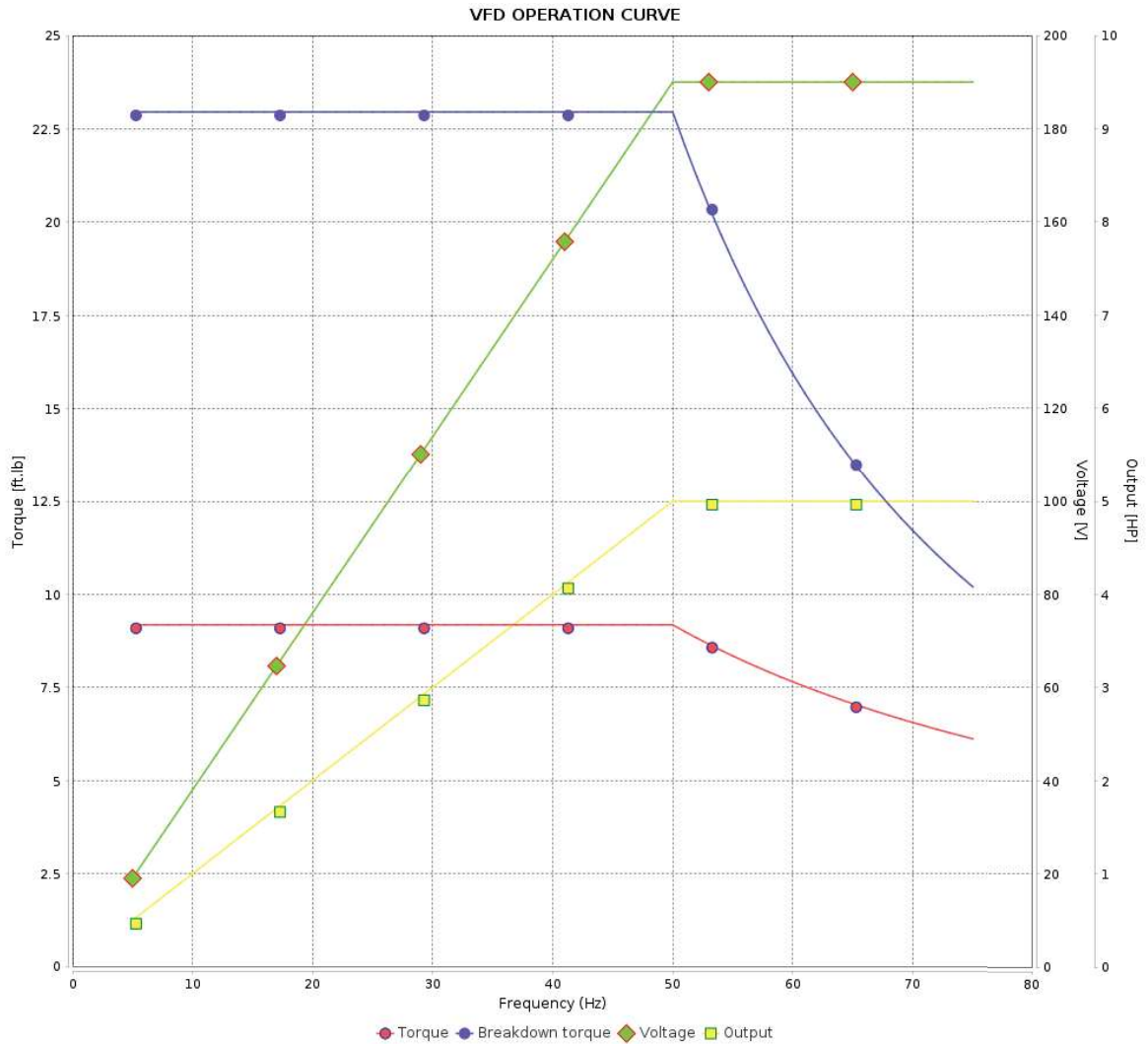
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 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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VFD OPERATION CURVE

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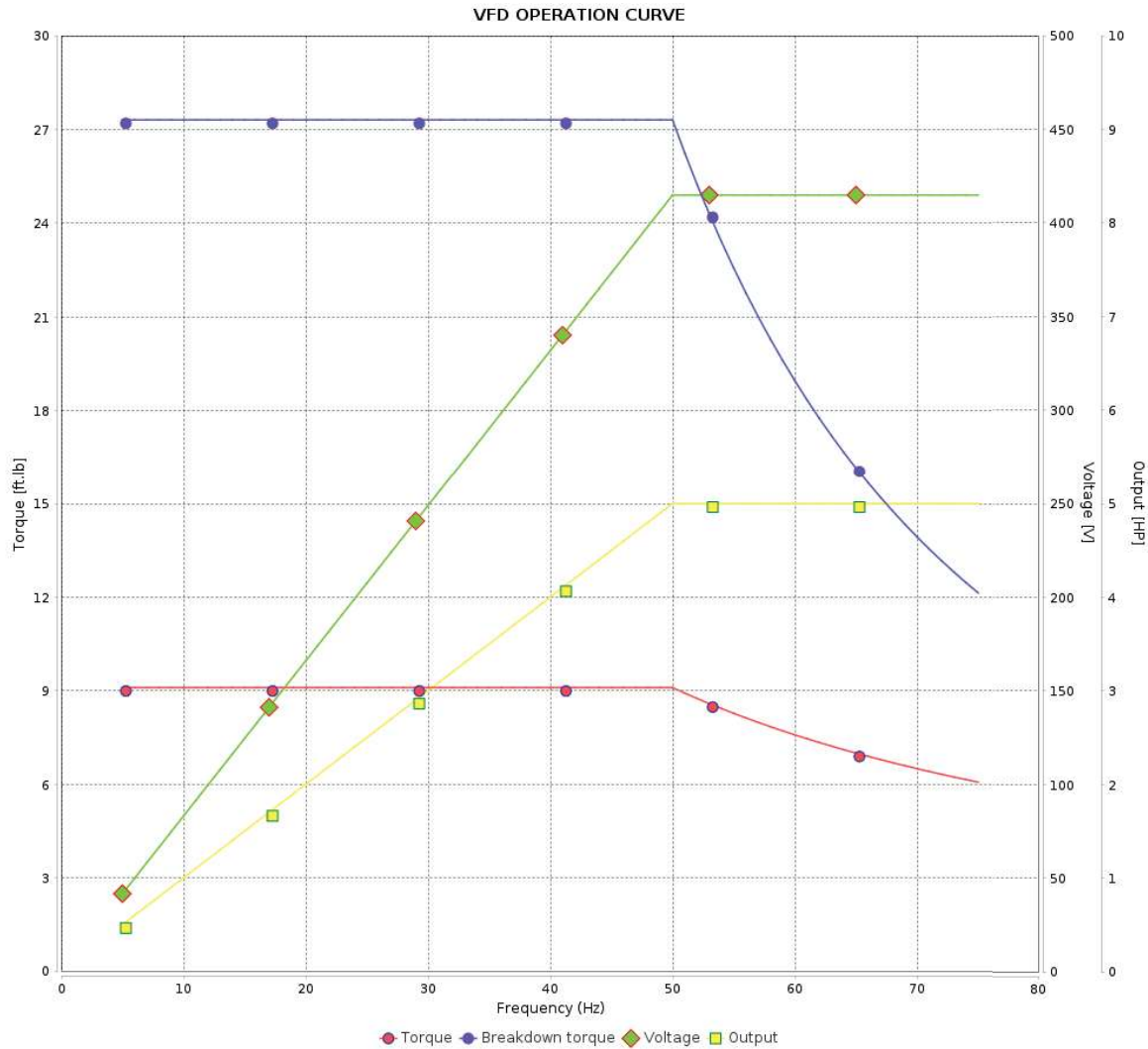


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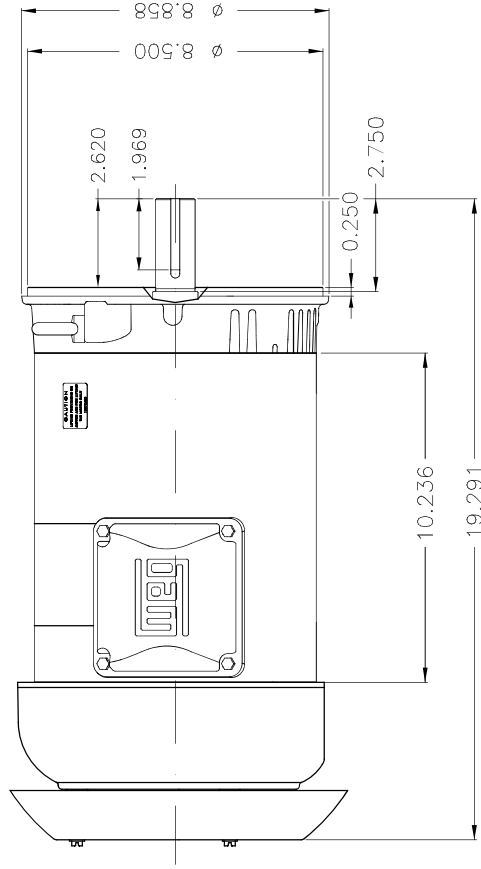
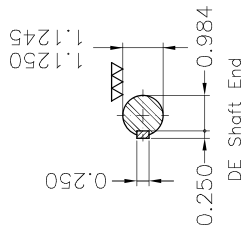
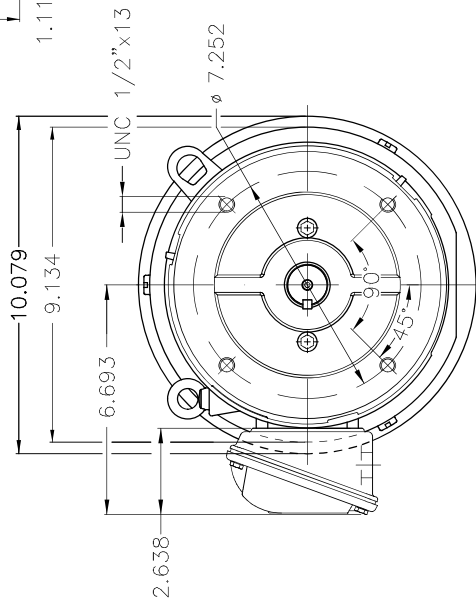
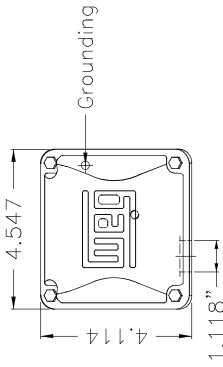
A

B

C

D

E



Color Munsell N 1 matte black
 Painting plan 207N
 Mounting W-6V18R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR ROLLED STEEL NEMA PREM. EFF.				00
CHECKED		FRAME 182/4TC IP55 TEFC				
RELEASED						
REL. DATE	WMO	Jaragua do Sul	WDD	00	1 / 1	
		Product Engineering	SHEET			



PREVIEW

5 HP 02 Poles 60 Hz

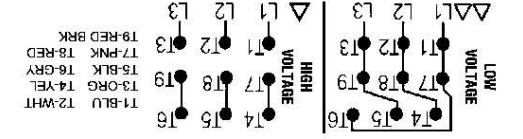
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Dimensions in inches

XME 3

conformément aux codes électriques locaux et nationaux afin d'éviter tout choc électrique grave. Déconnectez l'alimentation avant l'entretien de la machine.

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.



PH	3	Hz 60	HP 5.0	KW 3.7	V 230/460	A 11.8/5.90	SFA 13.6/6.79	SF 1.15	PF 0.89	RPM 3500	NEMA 3500	NOM. EFF. 88.5%
FR	182/4TC											
DUTY	CONT.											
ALT	1000 m.a.s.l.											
INS CL.	F AT 80K	IP55										
AMB	40°C	DES B										
ENCL.	TEFC	CODE J										
USABLE @	208V	13.1A										
ALTERNATE RATING:	5.0HP	50HZ	190-Z20/380-415V	SF1.00								
14.3-12.4/7.17-6.59A	2880RPM	EFF 85.2% (IE1)	IEC 60034-1									
ODE 8205-ZZ			MOBIL POLYREX EM									
DE 8206-ZZ												

MAT: 1267336 C029A
 W01.TE01C0X0N
 MODEL 00536ET3ER184TC-S
 For 60Hz: Class 1, Zone 2, IC
 Class 1, Div.2, Gr. A,B,C,D - T3
 Div 2 Inverter Duty (SF1.00)
 CT 2:1/VT 1000:1

