

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: JM Pump NEMA Premium Efficiency Three-Phase	Product code :	12676943
		Catalog # :	00236OT3E145JM-S
Frame	: 143/5JM	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	: 38.9 lb
Design	: B	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	190-220/380	415
Rated current [A]	4.84/2.42	5.82-5.03/2.91	2.71
L. R. Amperes [A]	43.1/21.5	40.2-34.7/20.1	22.2
LRC [A]	8.9x(Code K)	6.9x(Code H)	8.2x(Code J)
No load current [A]	1.83/0.917	1.81-1.56/0.906	1.05
Rated speed [RPM]	3510	2890	2910
Slip [%]	2.50	3.67	3.00
Rated torque [ft.lb]	2.99	3.63	3.61
Locked rotor torque [%]	220	180	220
Breakdown torque [%]	330	250	310
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	25s (cold) 14s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	62.0 dB(A)	60.0 dB(A)	60.0 dB(A)
Efficiency (%)	25%		
	50%	84.0	85.0
	75%	85.5	85.1
	100%	85.5	84.2
Power Factor	25%		
	50%	0.77	0.83
	75%	0.86	0.90
	100%	0.91	0.93
Bearing type	: <u>Drive end</u> 6206 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 78 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



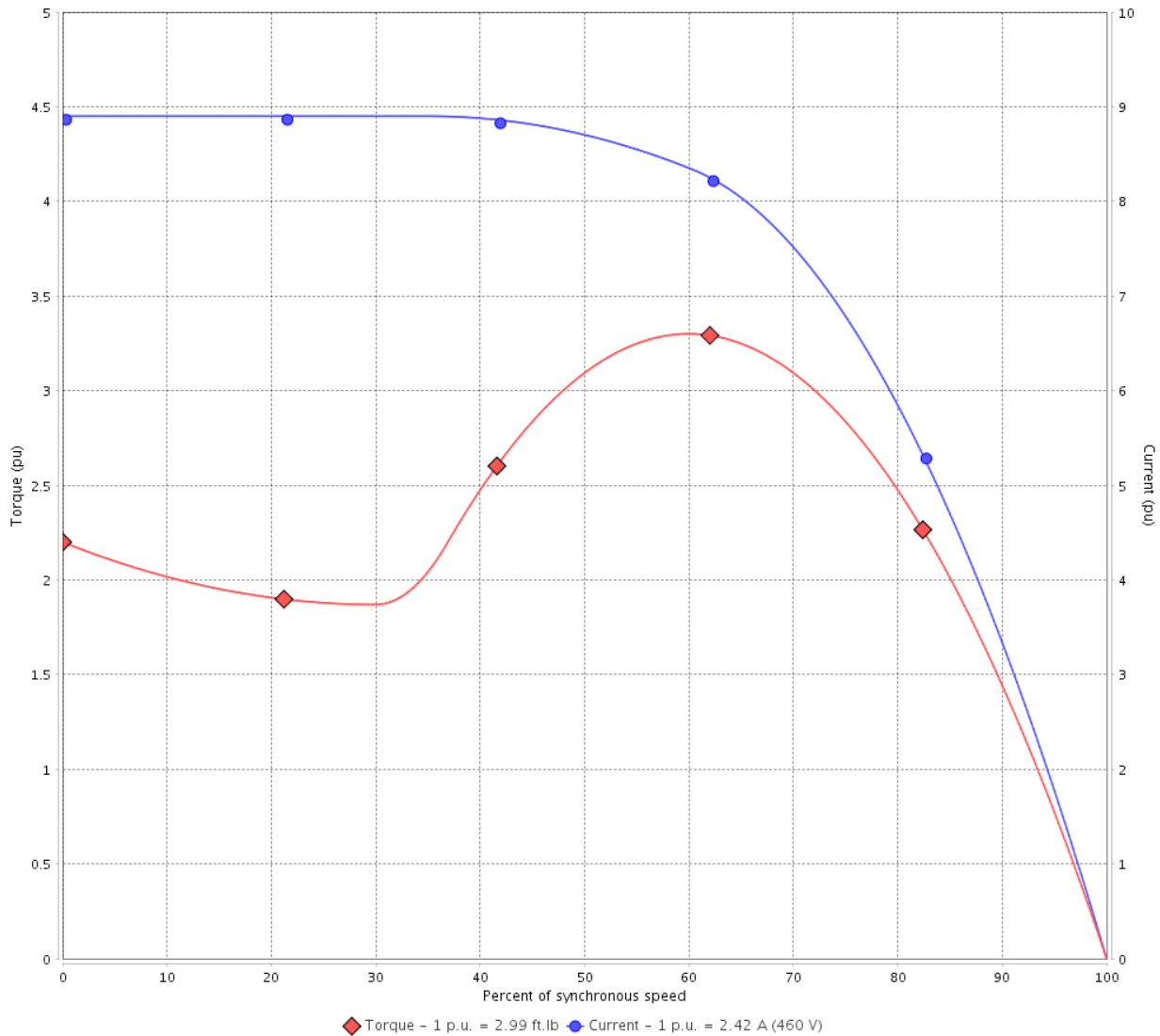
Customer :

Product line : JM Pump NEMA Premium
Efficiency Three-Phase

Product code : 12676943

Catalog # : 00236OT3E145JM-S

TORQUE AND CURRENT VS SPEED CURVE



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 : B

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

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TORQUE AND CURRENT VS SPEED CURVE



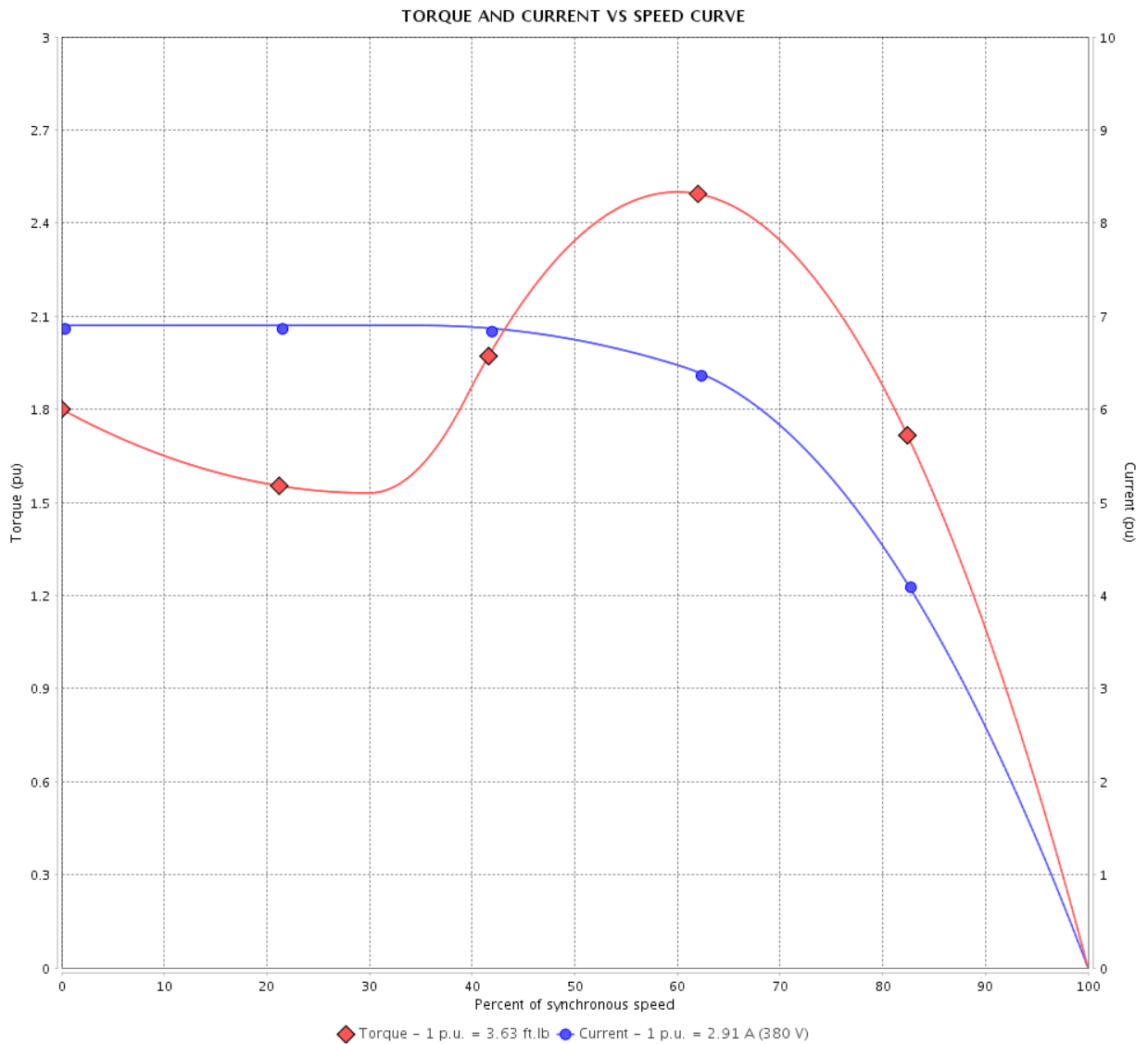
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : JM Pump NEMA Premium Efficiency Three-Phase

Product code : 12676943

Catalog # : 00236OT3E145JM-S



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

Rated current	: 5.82-5.03/2.91 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	: B

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

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TORQUE AND CURRENT VS SPEED CURVE

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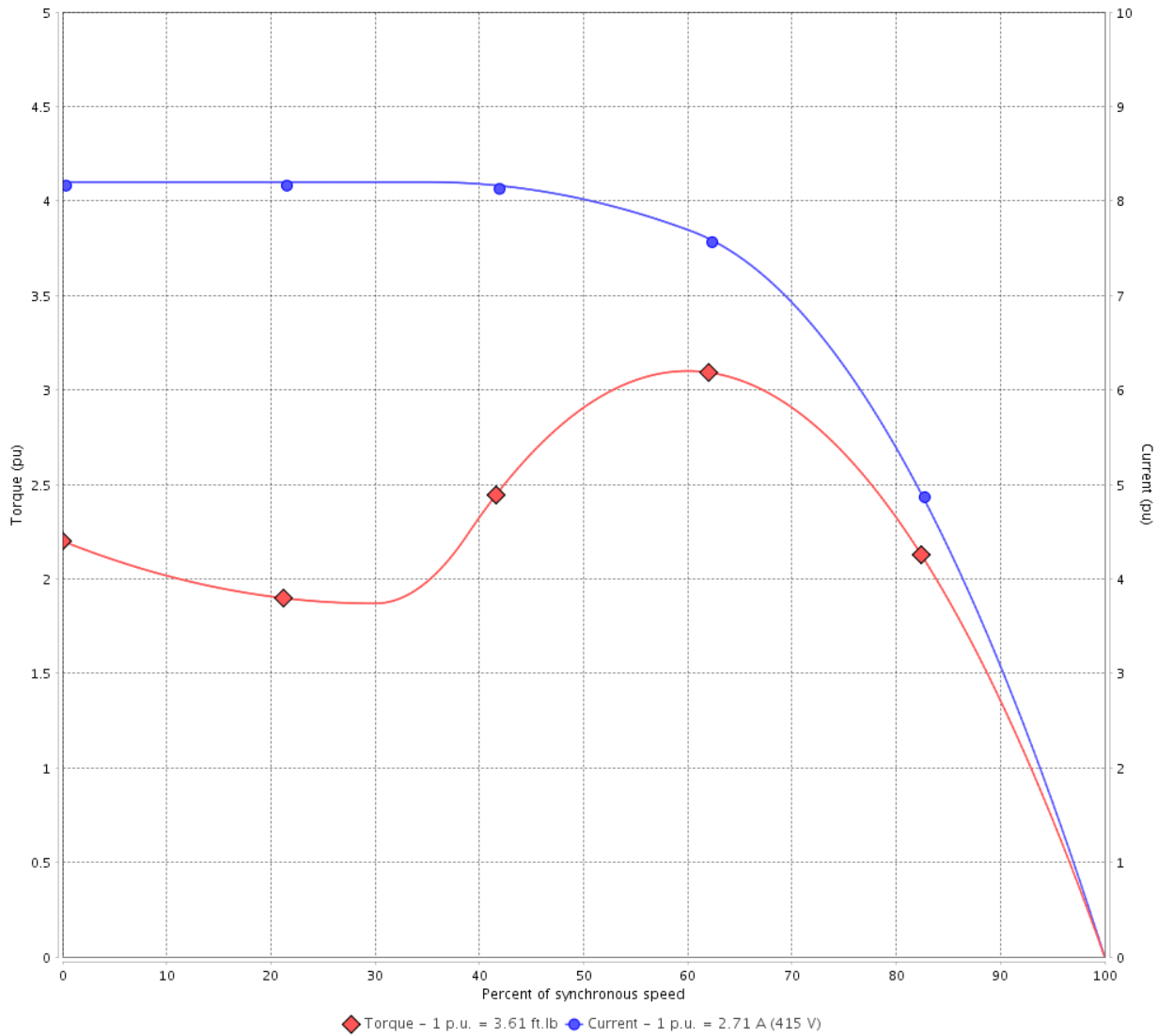
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Product code : 12676943

Catalog # : 00236OT3E145JM-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 415 V 50 Hz 2P

Rated current	: 2.71 A	Moment of inertia (J)	: 0.1151 sq.ft.lb
LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2910 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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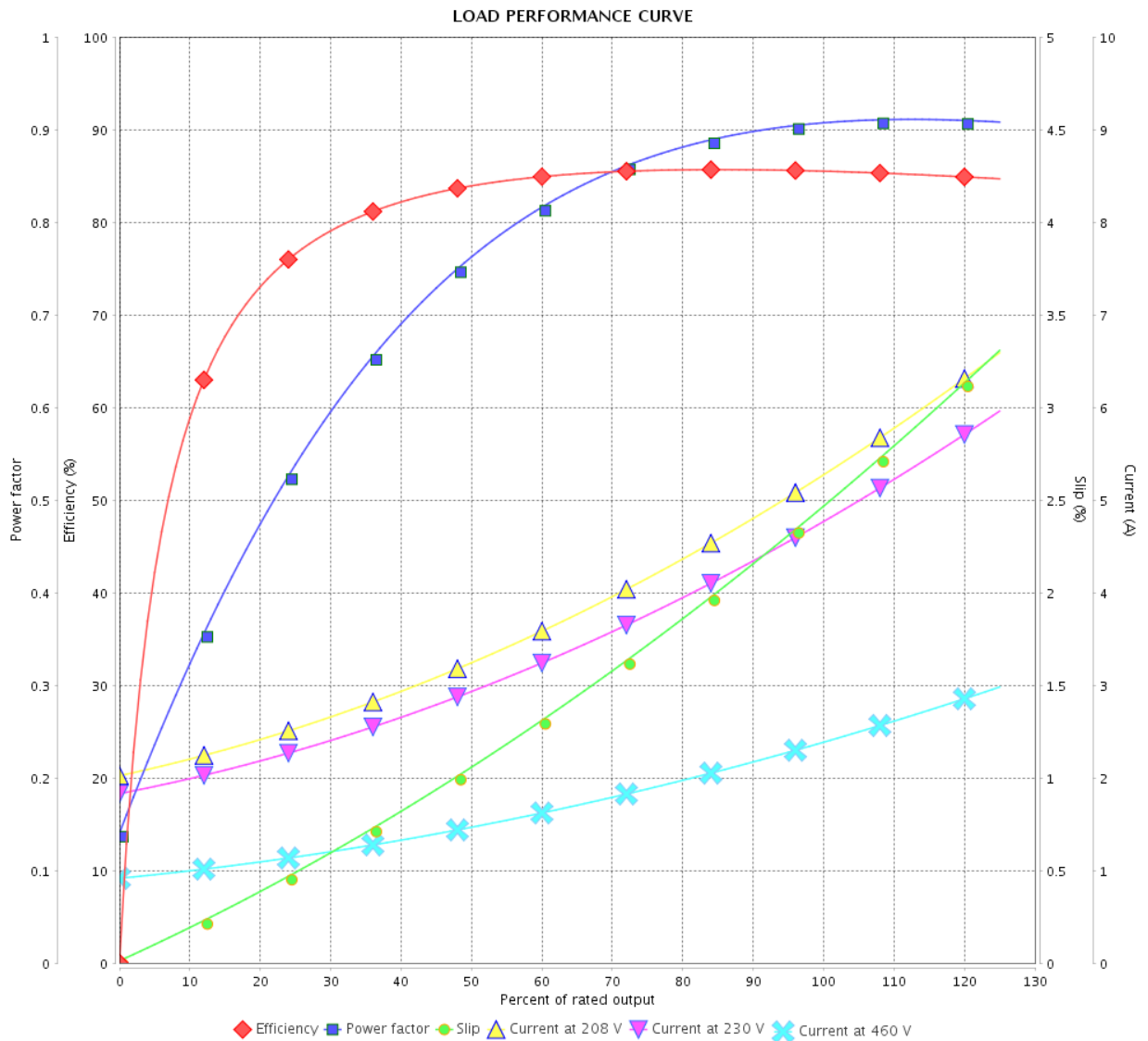


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 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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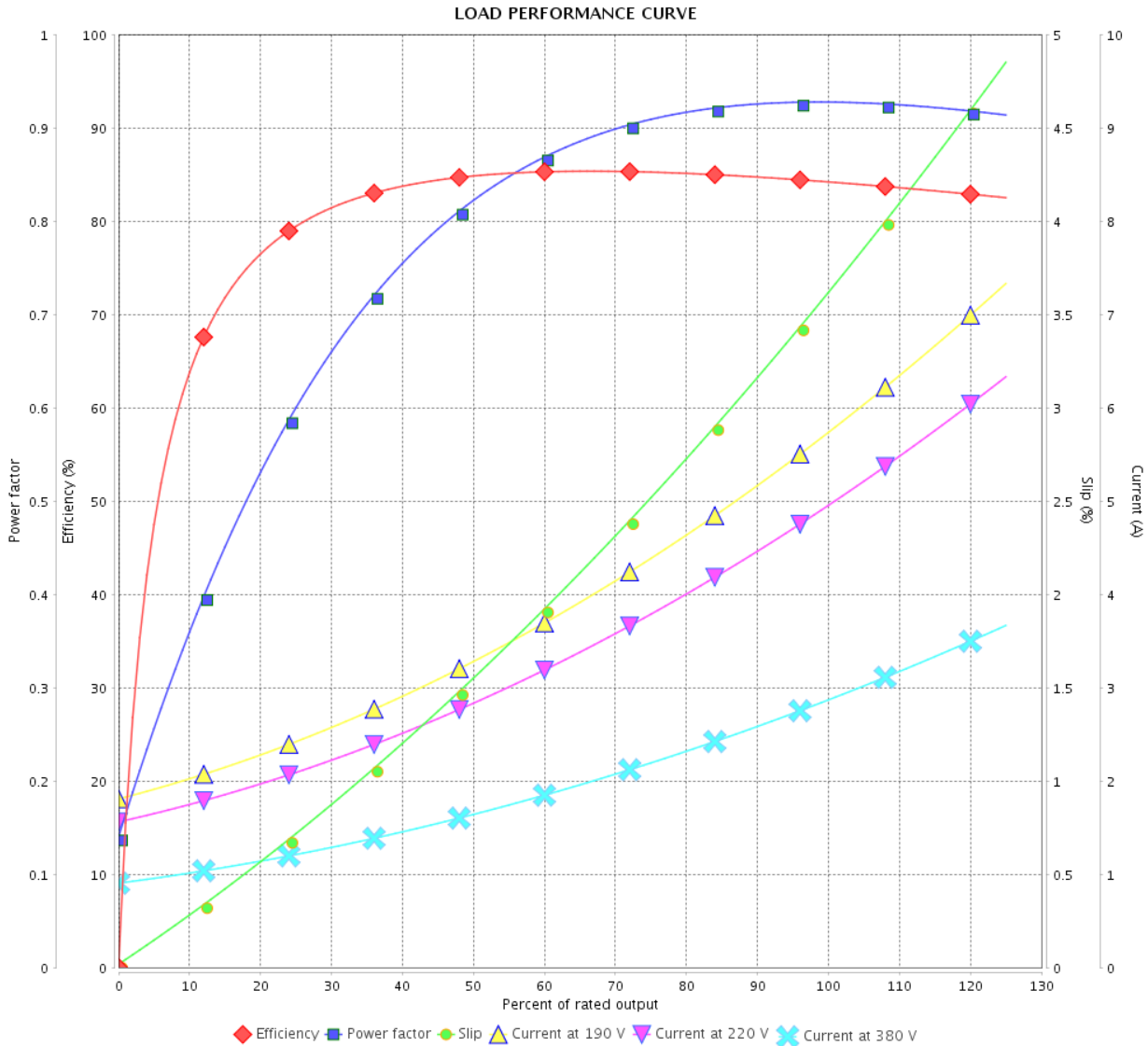


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Performance : 190-220/380 V 50 Hz 2P

Rated current : 5.82-5.03/2.91 A
 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 : B

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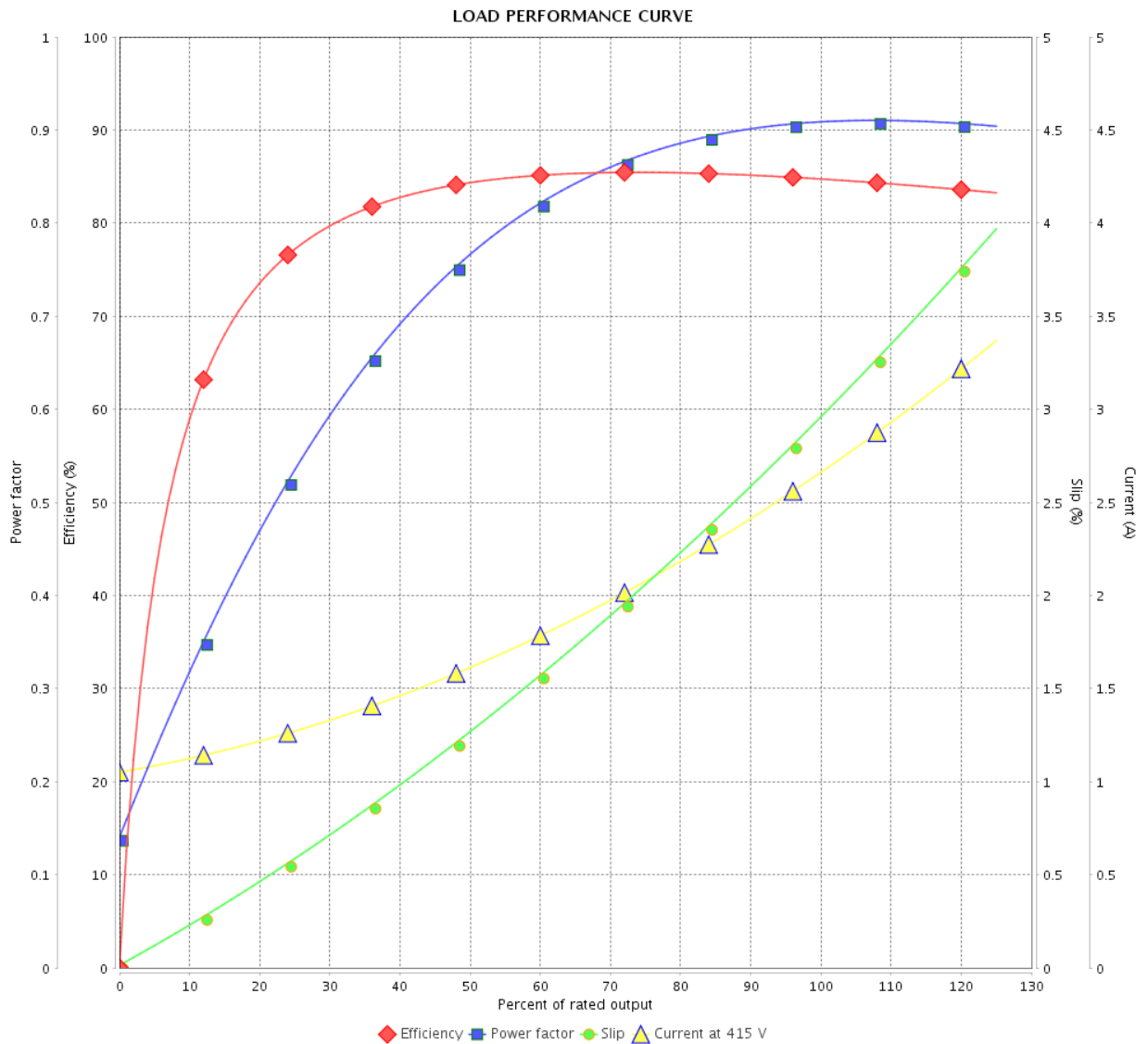


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Catalog # : 00236OT3E145JM-S



Performance : 415 V 50 Hz 2P

Rated current : 2.71 A
 LRC : 8.2
 Rated torque : 3.61 ft.lb
 Locked rotor torque : 220 %
 Breakdown torque : 310 %
 Rated speed : 2910 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 : B

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THERMAL LIMIT CURVE



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Insulation class : F
Service factor :
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

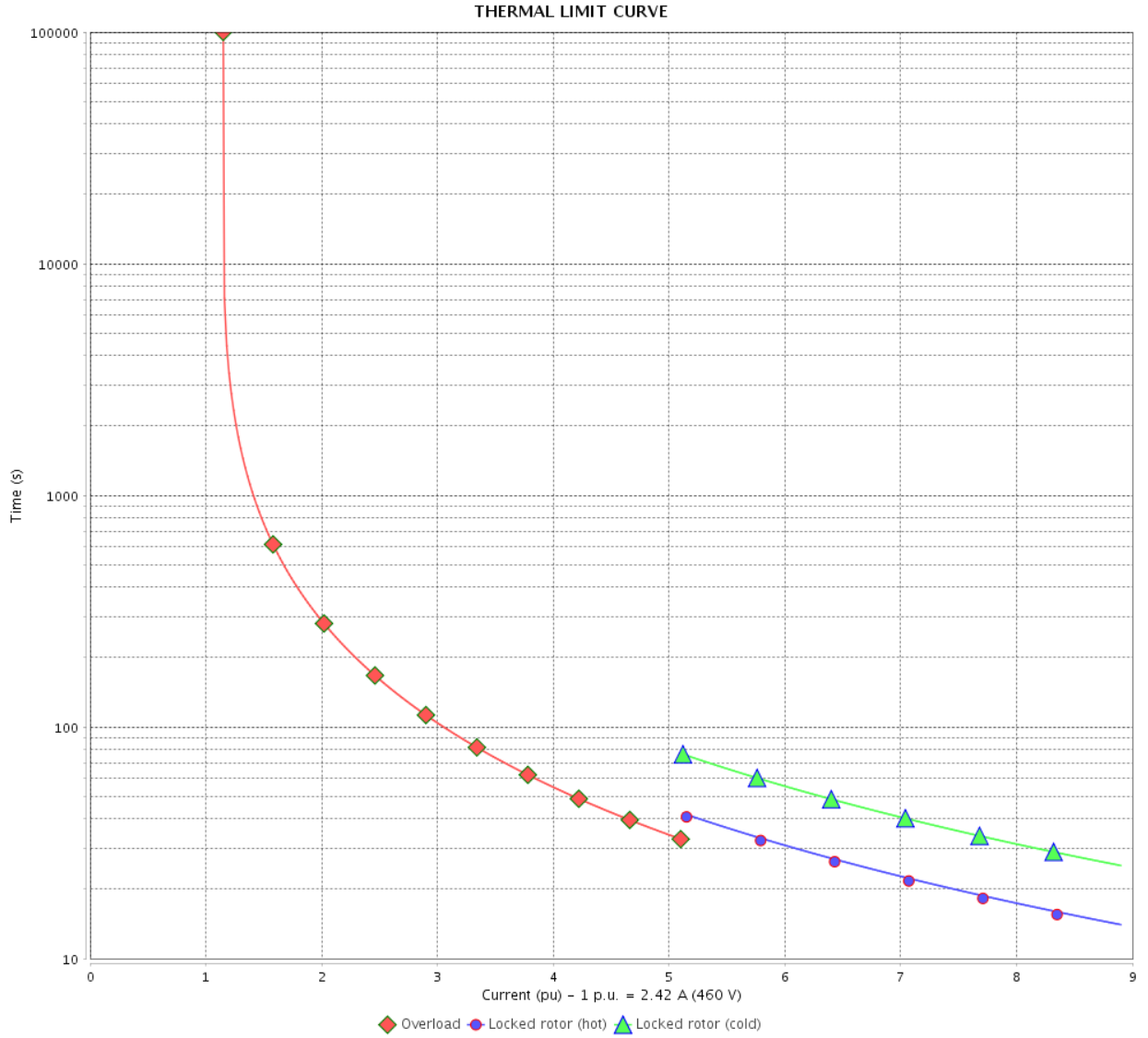
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Cooling constant

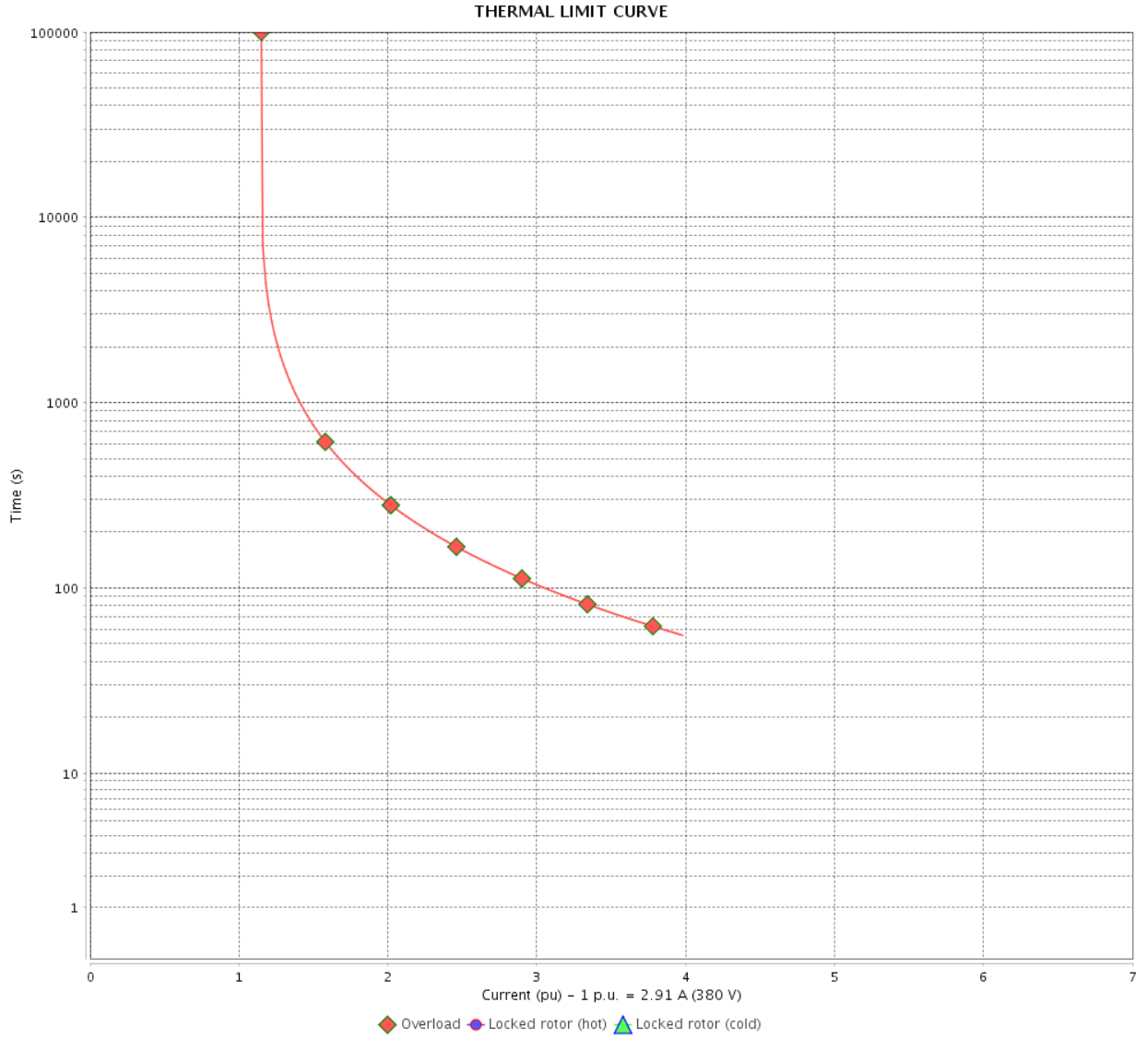
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LRC	: 8.2	Duty cycle	: Cont.(S1)
Rated torque	: 3.61 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2910 rpm	Design	: B

Heating constant

Cooling constant

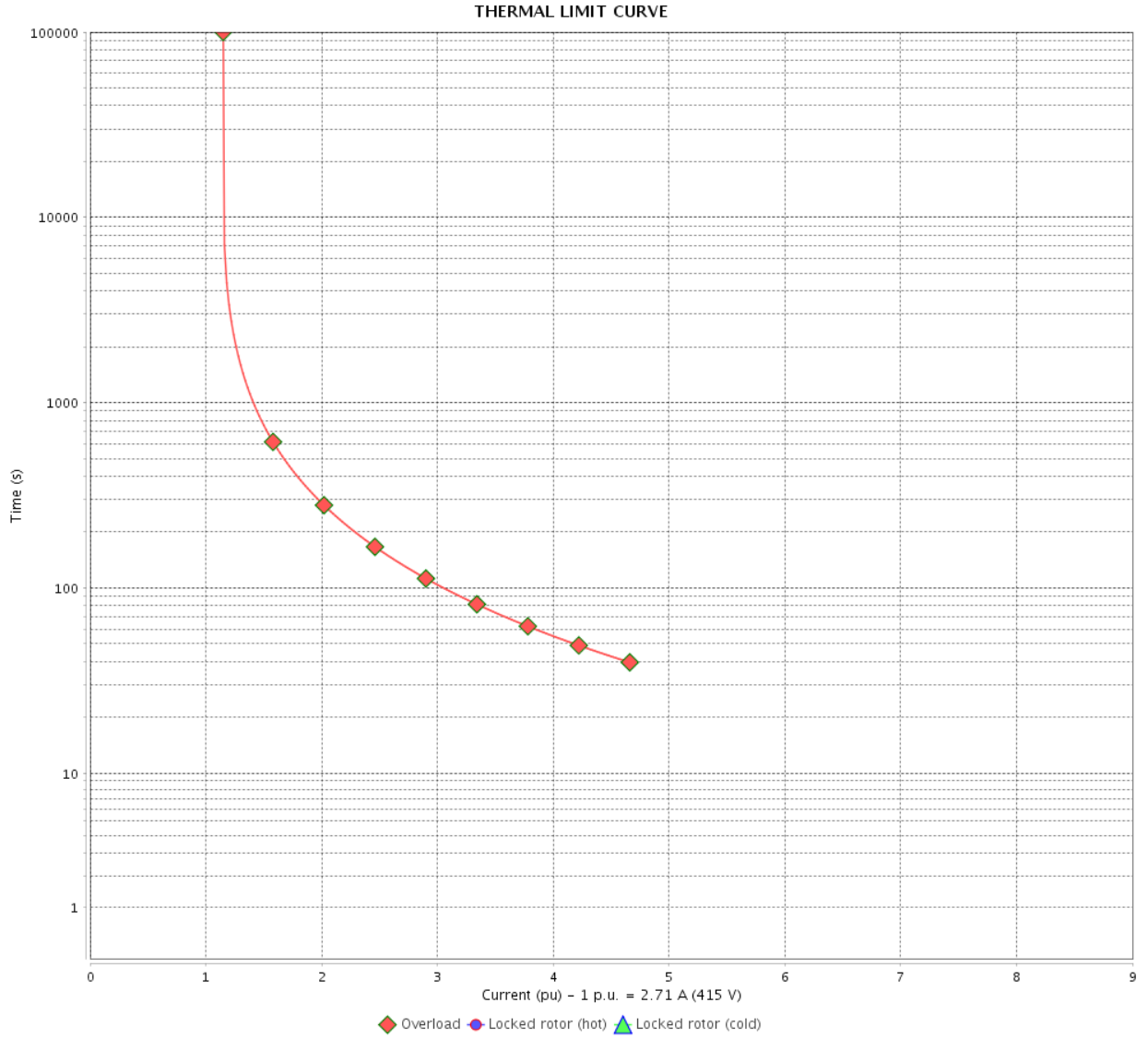
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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

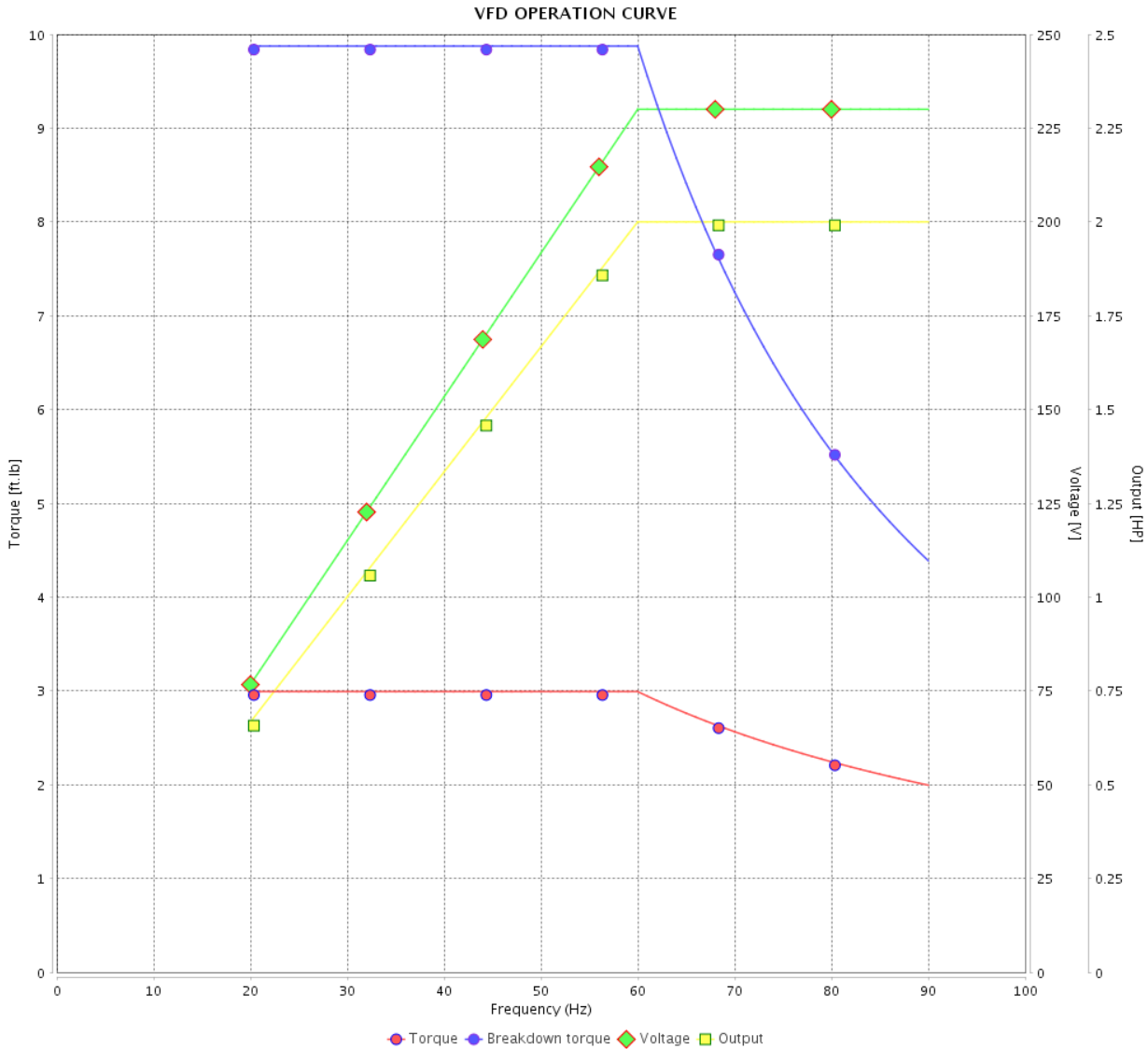


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 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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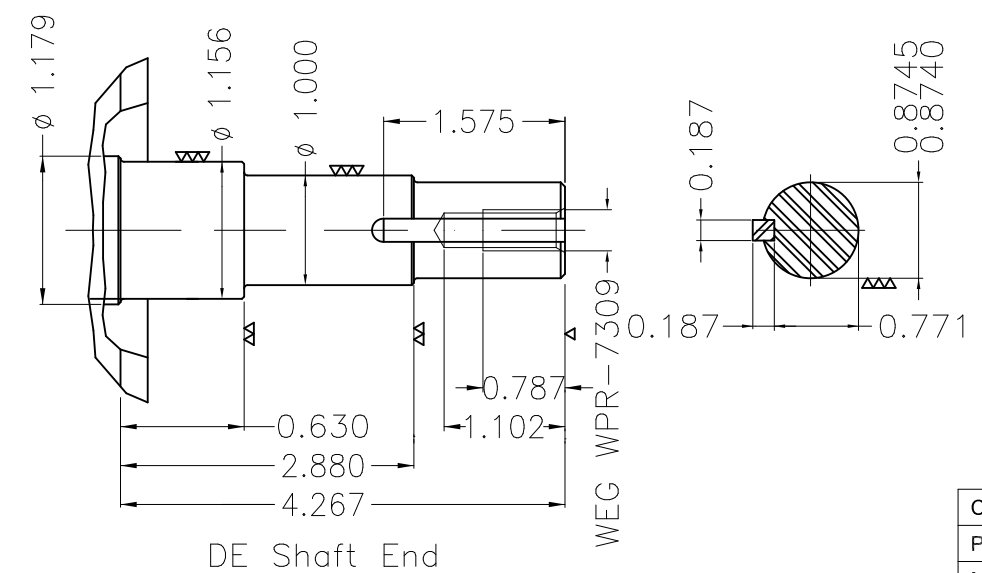
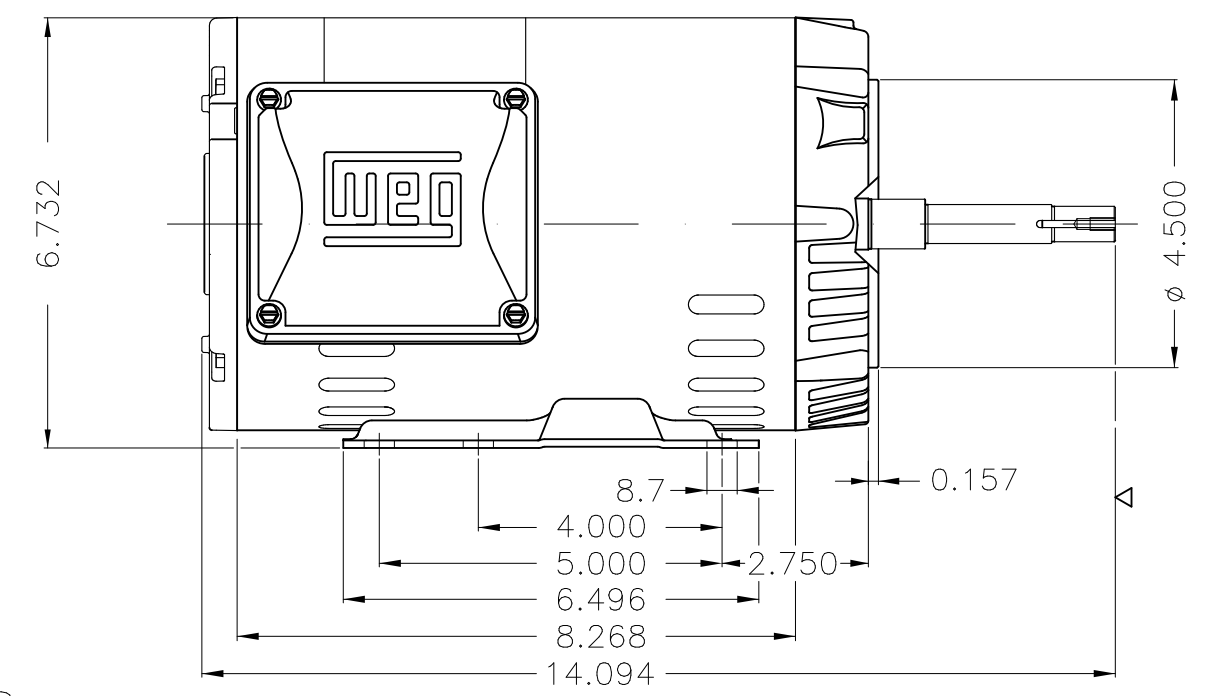
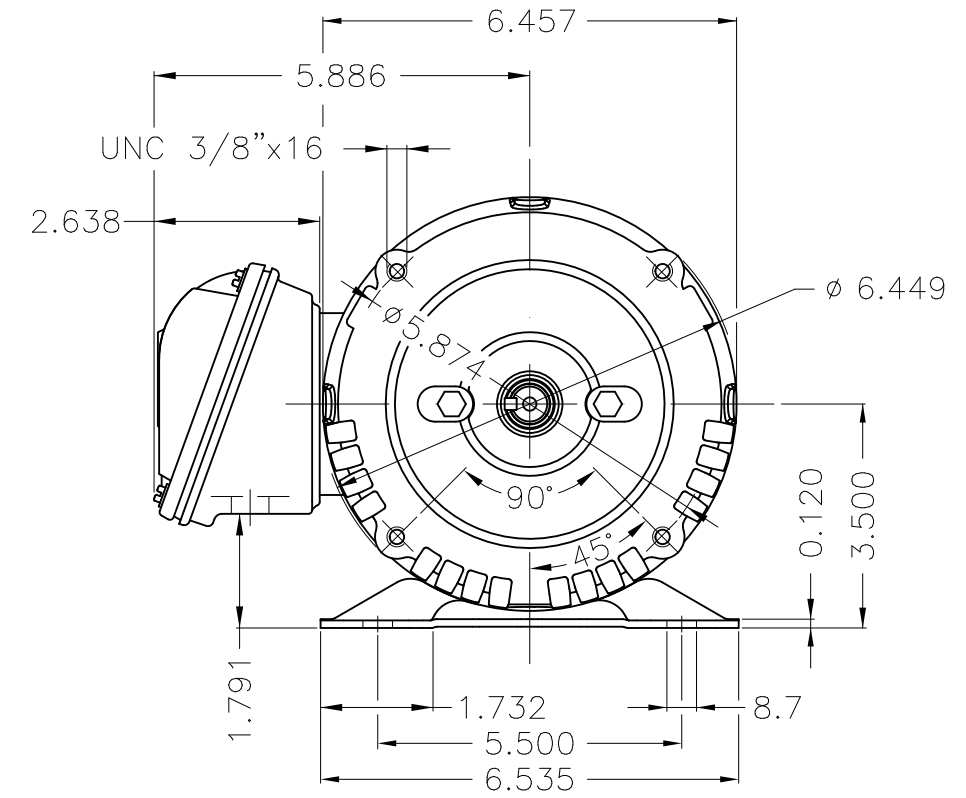
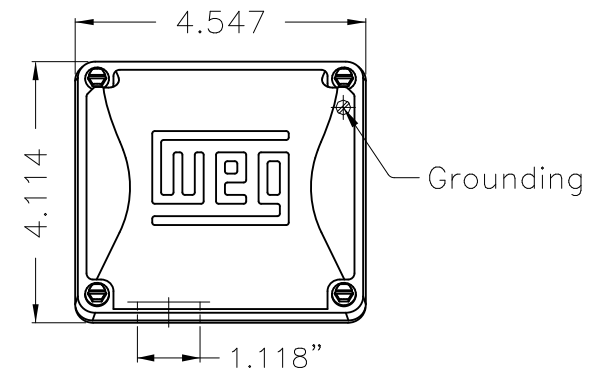
A

B

C

D

E



EUNC 3/8" - 16 WEG WPR-7309

DE Shaft End

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	PIRWUSER	THREE PH. MOTOR ROLLED STEEL CLOSE COUPLED PUMP JN TYPE PSE 143							
CHECKED		FRAME 143/5JM IP21 ODP							
RELEASED									
REL DT.		WMO	Jaragua do Sul	Product Engineering	WDD				

2 HP 02 Poles 60 Hz



NEMA
Premium



3PT9



Energy Verified

MADE IN MEXICO

MAT: 12676943 CC029A

W01.T00IC0X0N

MODEL 002360T3E145JM-S

12JAN2022 B/N:

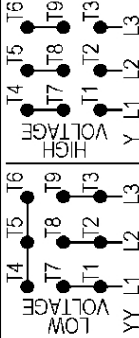


PH 3	Hz 60	HP 2.0
FR 143/5JM		KW 1.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 4.84/2.42
INS CL F AT 80K		SFA 5.57/2.78
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE K	PF 0.91
USABLE @ 208V 5.35A		RPM 3510
SF1.00		NEMA NOM. EFF 85.5%

ALTERNATE RATING: 2.0HP 50Hz 190-220/380-415V SF1.15
5.82-5.11/2.91-2.71A 2890RPM EFF 84.2% (IE3) IEC 60034-1

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

DE 6206-ZZ	ODE 6203-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.

