

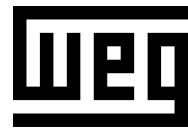
DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :			
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12674953
		Catalog # :	00118OT3E143T-SG
Frame	: 143/5T	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	: 34.9 lb
Design	: B	Moment of inertia (J)	: 0.1101 sq.ft.lb
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]	3.02/1.51	3.44/1.72	3.15/1.67
L. R. Amperes [A]	24.2/12.1	22.4/11.2	22.4/11.9
LRC [A]	8.0x(Code L)	6.5x(Code J)	7.1x(Code K)
No load current [A]	1.92/0.958	1.88/0.942	1.93/1.02
Rated speed [RPM]	1760	1445	1450
Slip [%]	2.22	3.67	3.33
Rated torque [ft.lb]	2.98	3.63	3.62
Locked rotor torque [%]	290	200	229
Breakdown torque [%]	360	270	300
Service factor		1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	39s (cold) 22s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	52.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%	79.9	80.7
	50%	81.5	81.0
	75%	84.0	83.2
	100%	85.5	83.1
Power Factor	25%	0.29	0.31
	50%	0.51	0.55
	75%	0.65	0.69
	100%	0.73	0.78
Bearing type	: <u>Drive end</u> 6205 ZZ <u>Non drive end</u> 6203 ZZ	Foundation loads	
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 77 lb
		Max. compression	: 112 lb
Lubrication interval	: - -		
Lubricant amount	: - -		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 3.34A SF 1.00 SFA 3.34A			
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

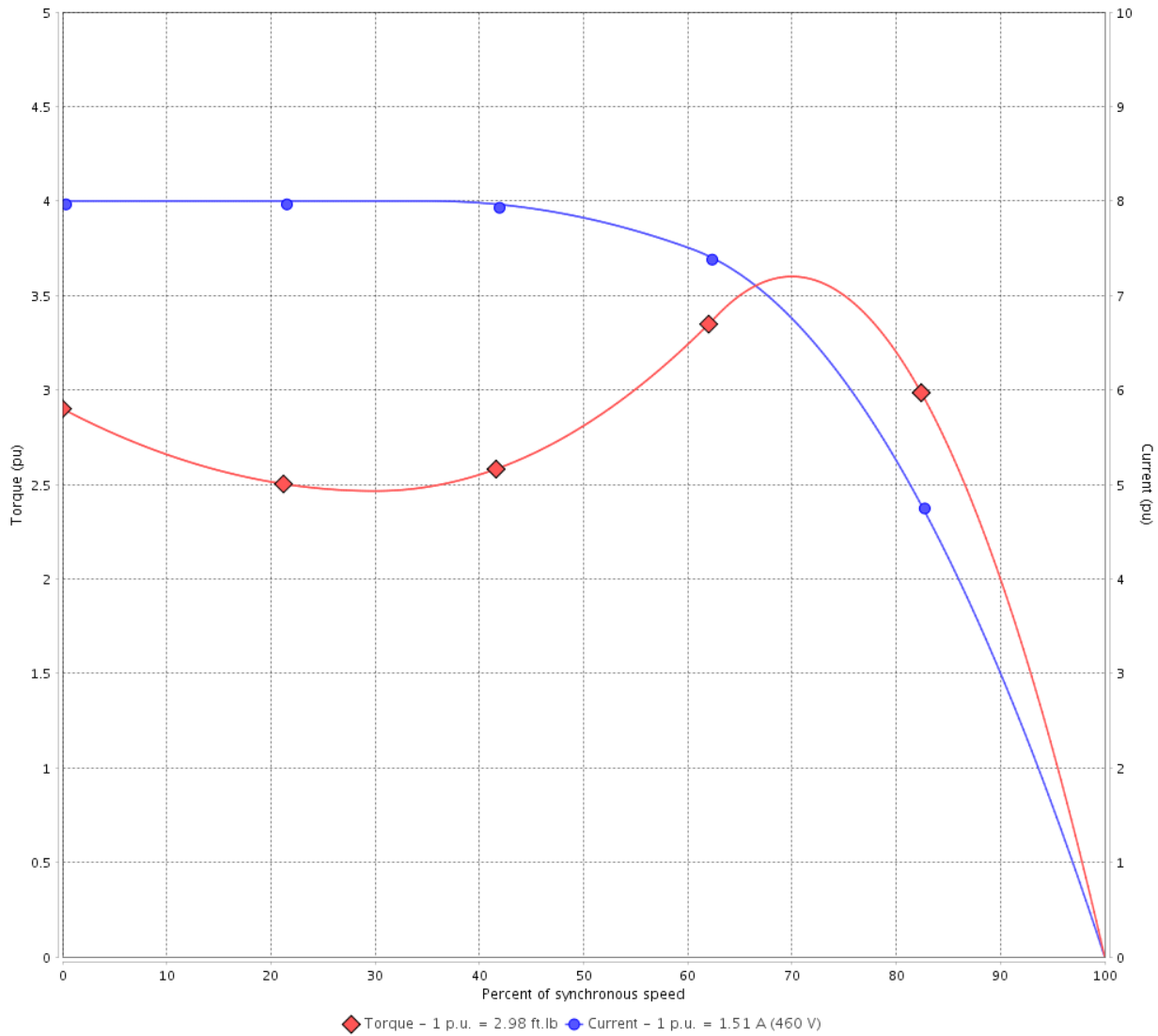
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674953

Catalog # : 001180T3E143T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current	: 3.02/1.51 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	:
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Locked rotor time : 39s (cold) 22s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



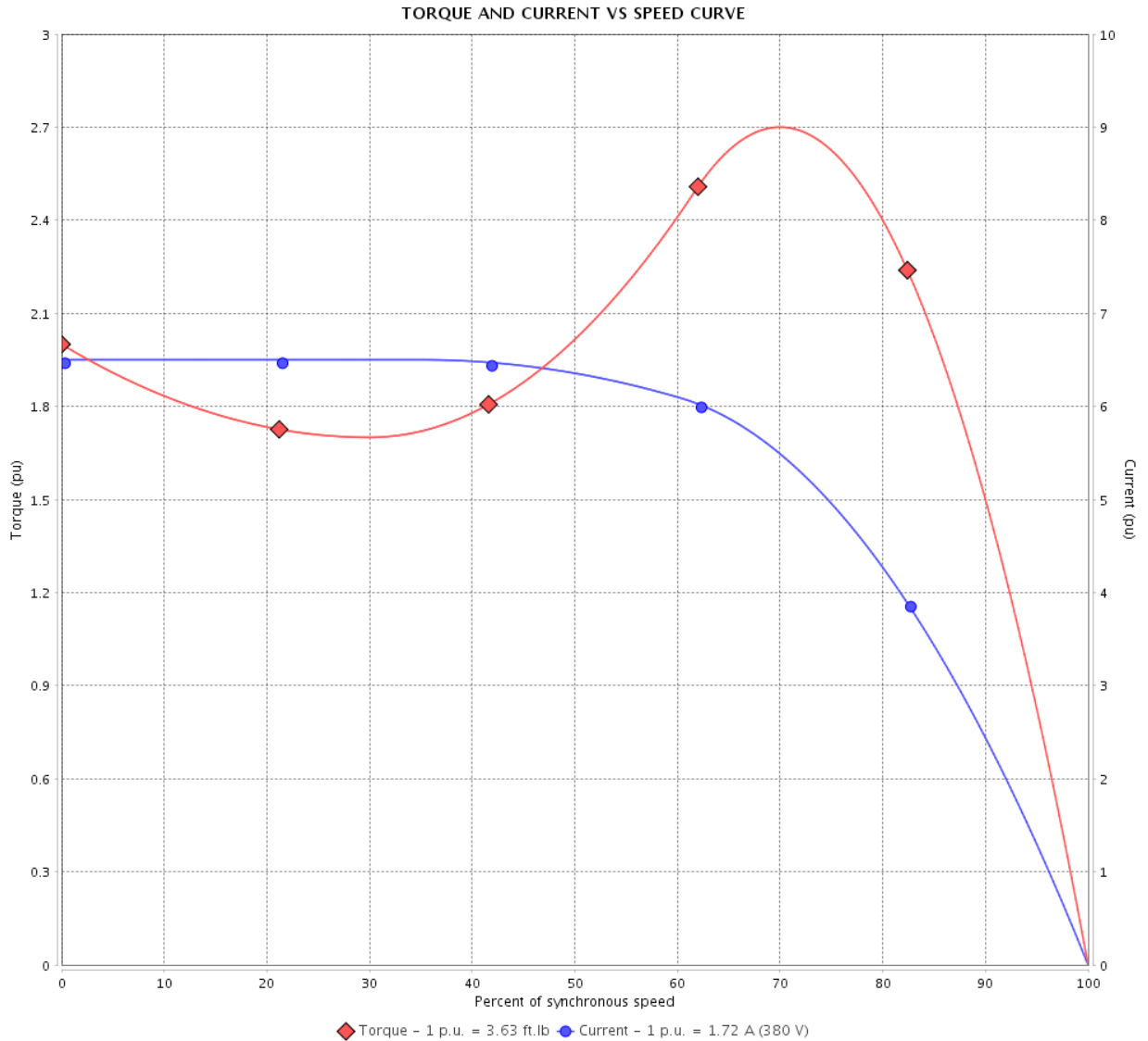
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674953

Catalog # : 00118OT3E143T-SG



Performance : 190/380 V 50 Hz 4P

Rated current : 3.44/1.72 A
 LRC : 6.5
 Rated torque : 3.63 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.1101 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



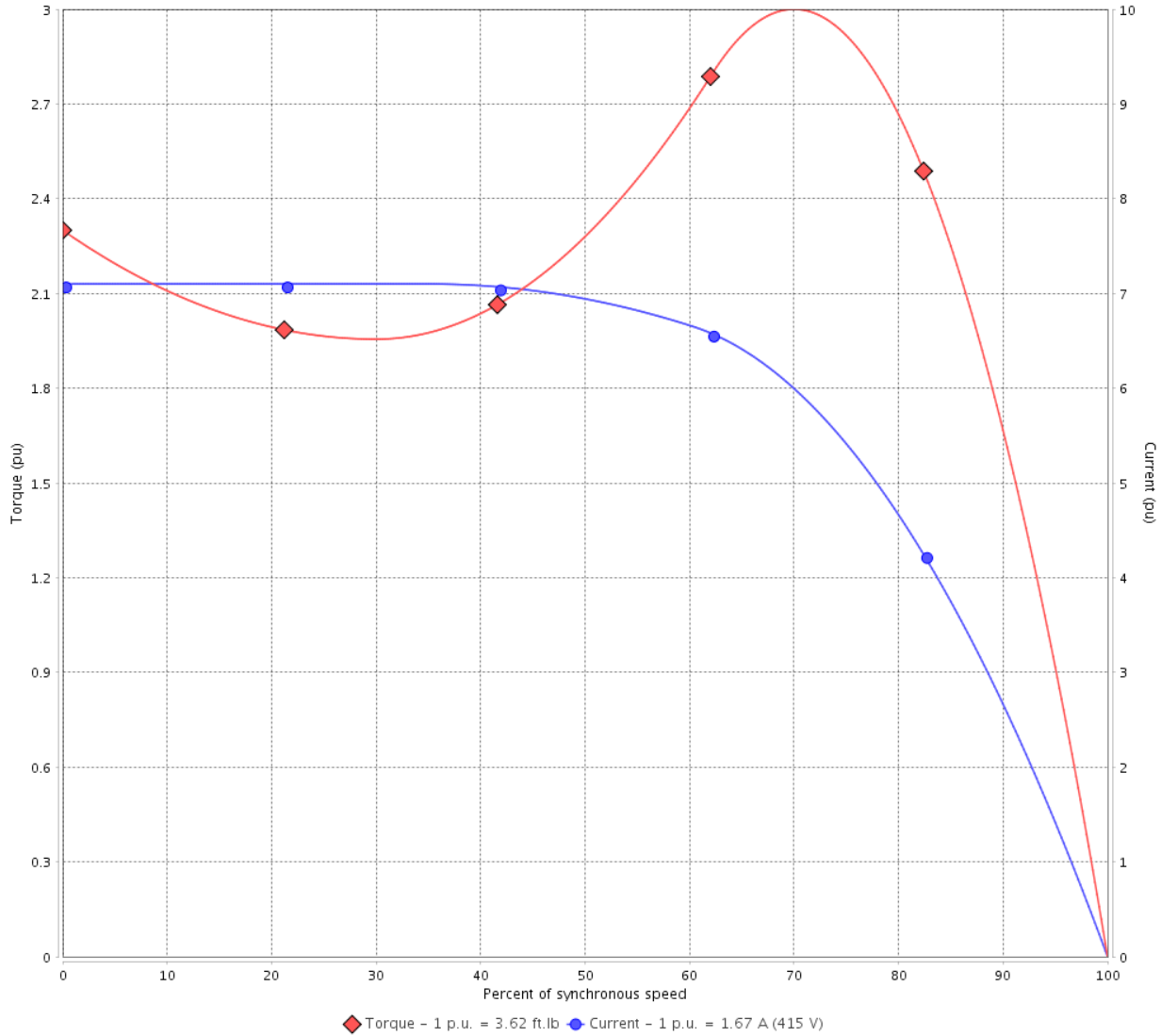
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674953

Catalog # : 001180T3E143T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 3.15/1.67 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 3.62 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1450 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

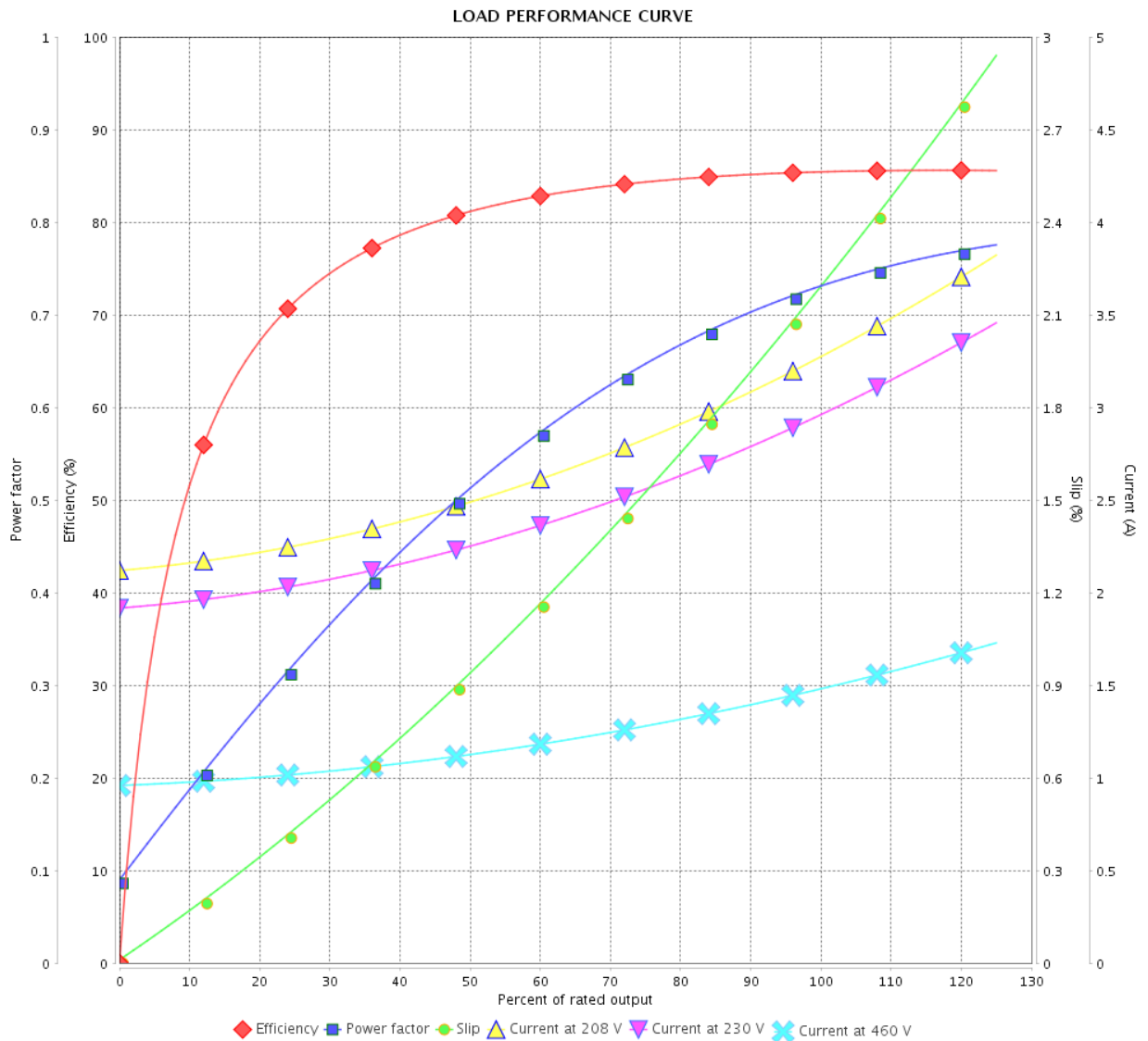


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12674953

Catalog # : 00118OT3E143T-SG



Performance : 230/460 V 60 Hz 4P

Rated current : 3.02/1.51 A
 LRC : 8.0
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1101 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage



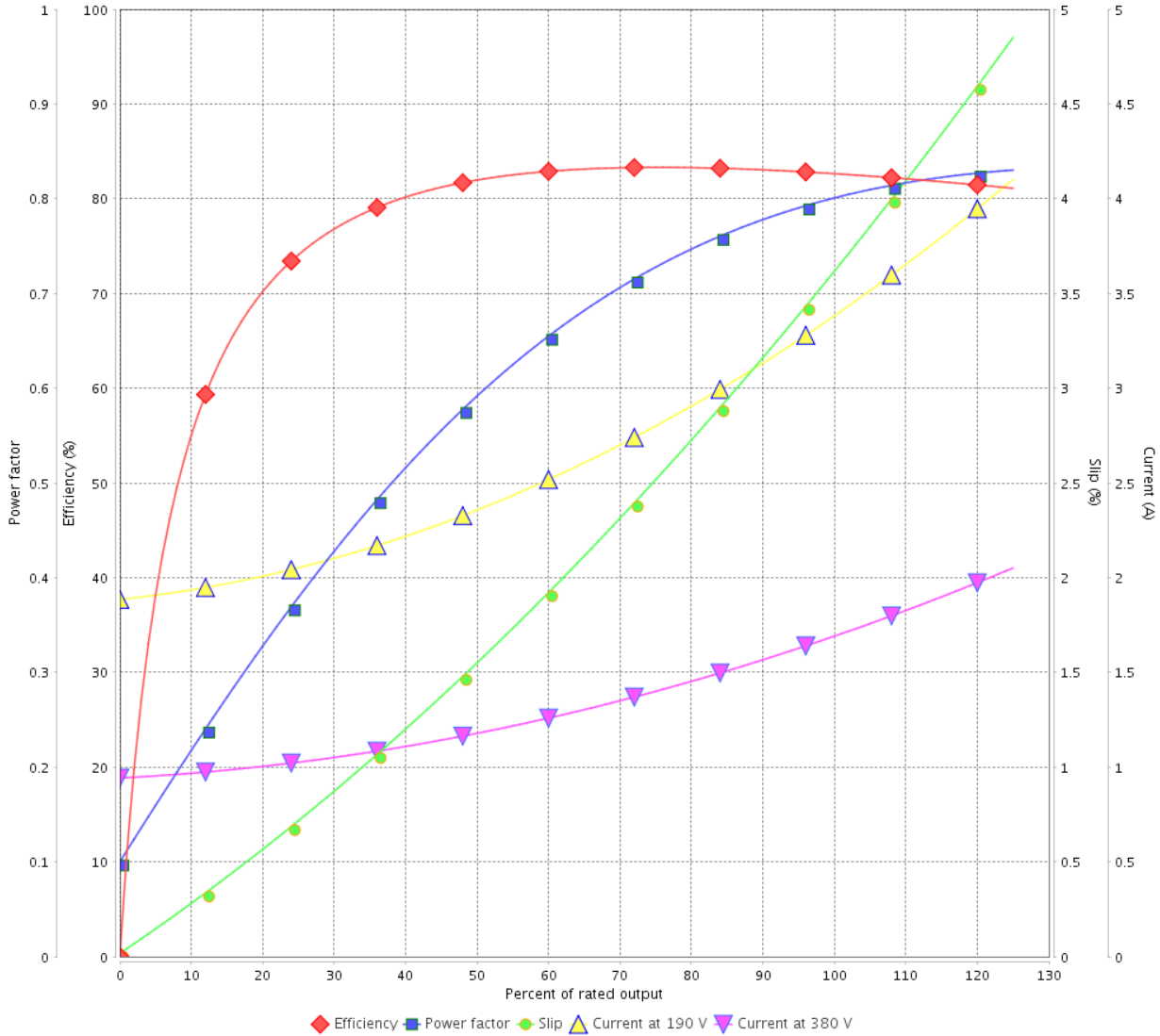
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LOAD PERFORMANCE CURVE



Performance : 190/380 V 50 Hz 4P

Rated current : 3.44/1.72 A
 LRC : 6.5
 Rated torque : 3.63 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 1445 rpm

Moment of inertia (J) : 0.1101 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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Three Phase Induction Motor - Squirrel Cage

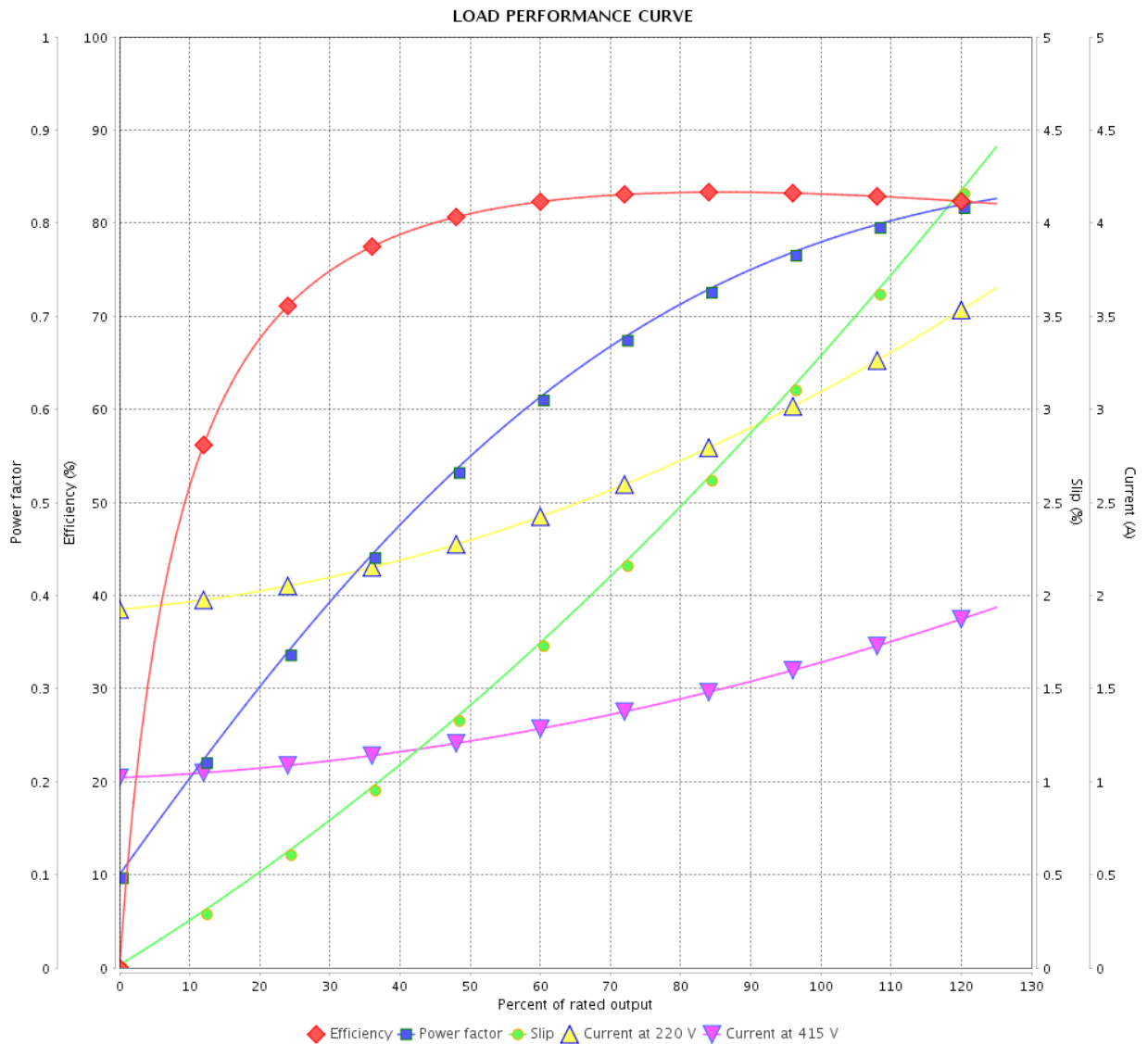


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Performance : 220/415 V 50 Hz 4P

Rated current : 3.15/1.67 A
 LRC : 7.1
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 Breakdown torque : 300 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.1101 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

Three Phase Induction Motor - Squirrel Cage



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LRC	: 8.0	Duty cycle	: Cont.(S1)
Rated torque	: 2.98 ft.lb	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	:
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1760 rpm	Design	: B

Heating constant

Cooling constant

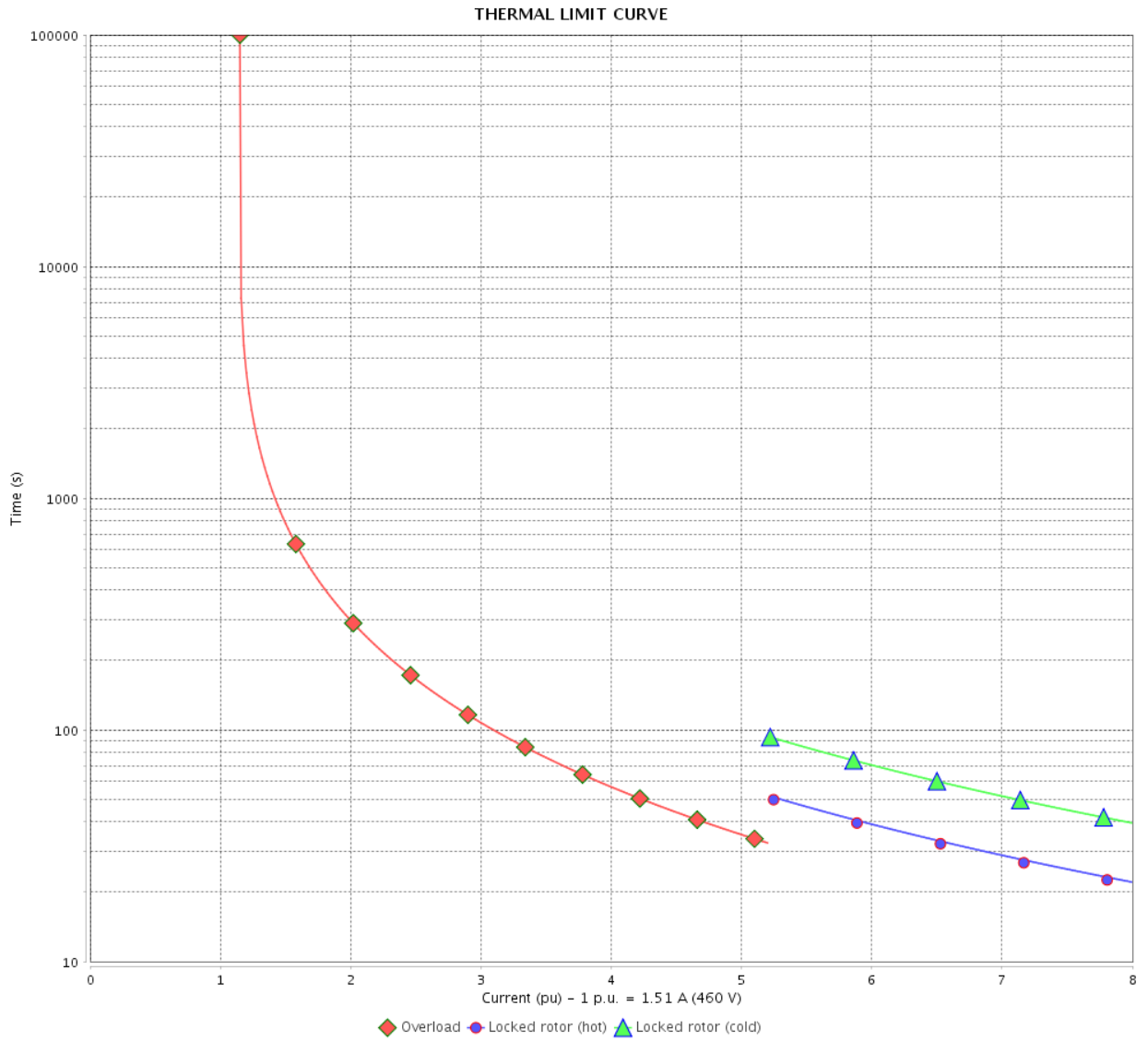
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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

THERMAL LIMIT CURVE



Three Phase Induction Motor - Squirrel Cage

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Product code : 12674953
Catalog # : 00118OT3E143T-SG

Performance : 190/380 V 50 Hz 4P

Rated current	: 3.44/1.72 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 3.63 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1445 rpm	Design	: B

Heating constant

Cooling constant

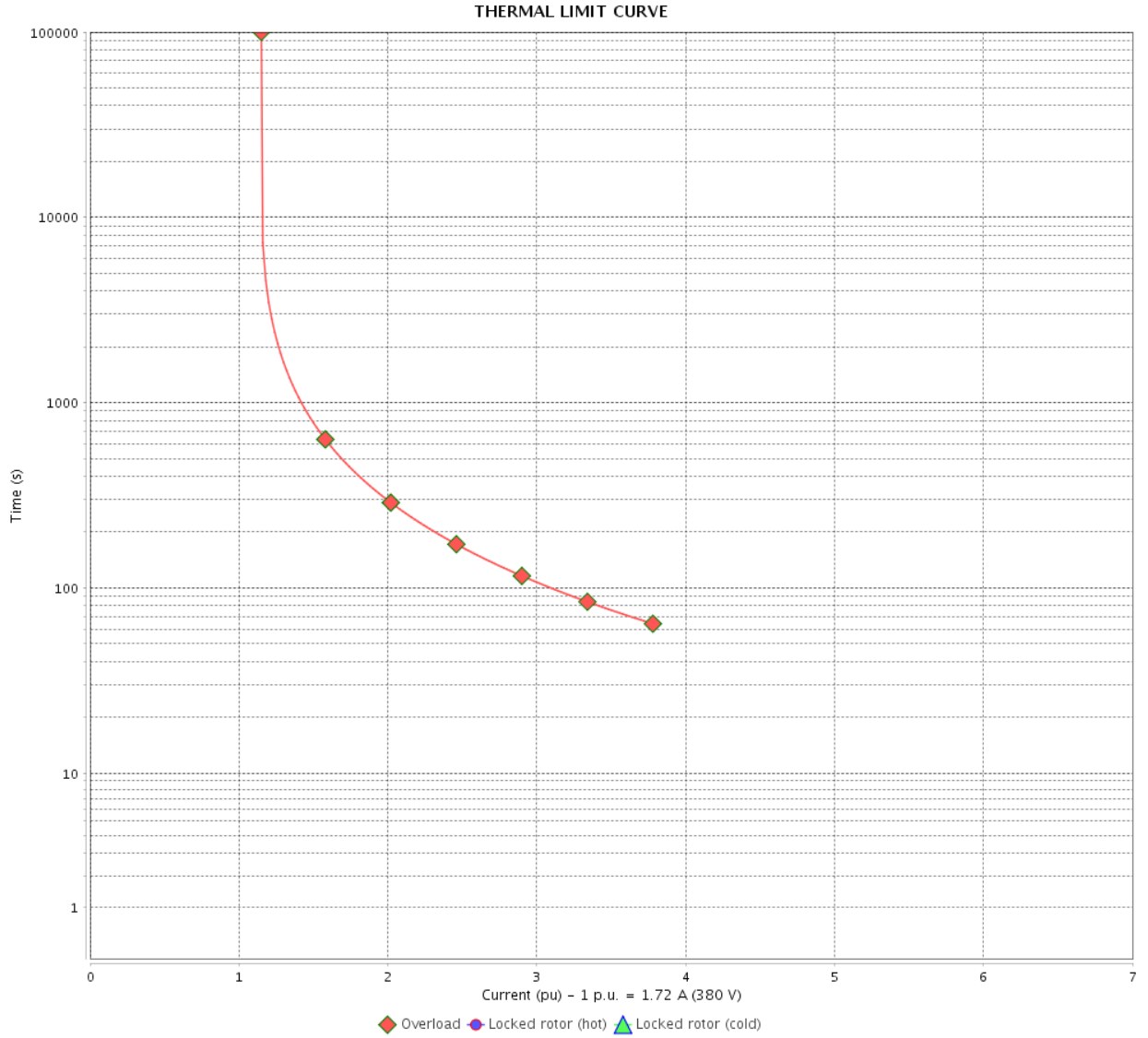
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Rated current	: 3.15/1.67 A	Moment of inertia (J)	: 0.1101 sq.ft.lb
LRC	: 7.1	Duty cycle	: Cont.(S1)
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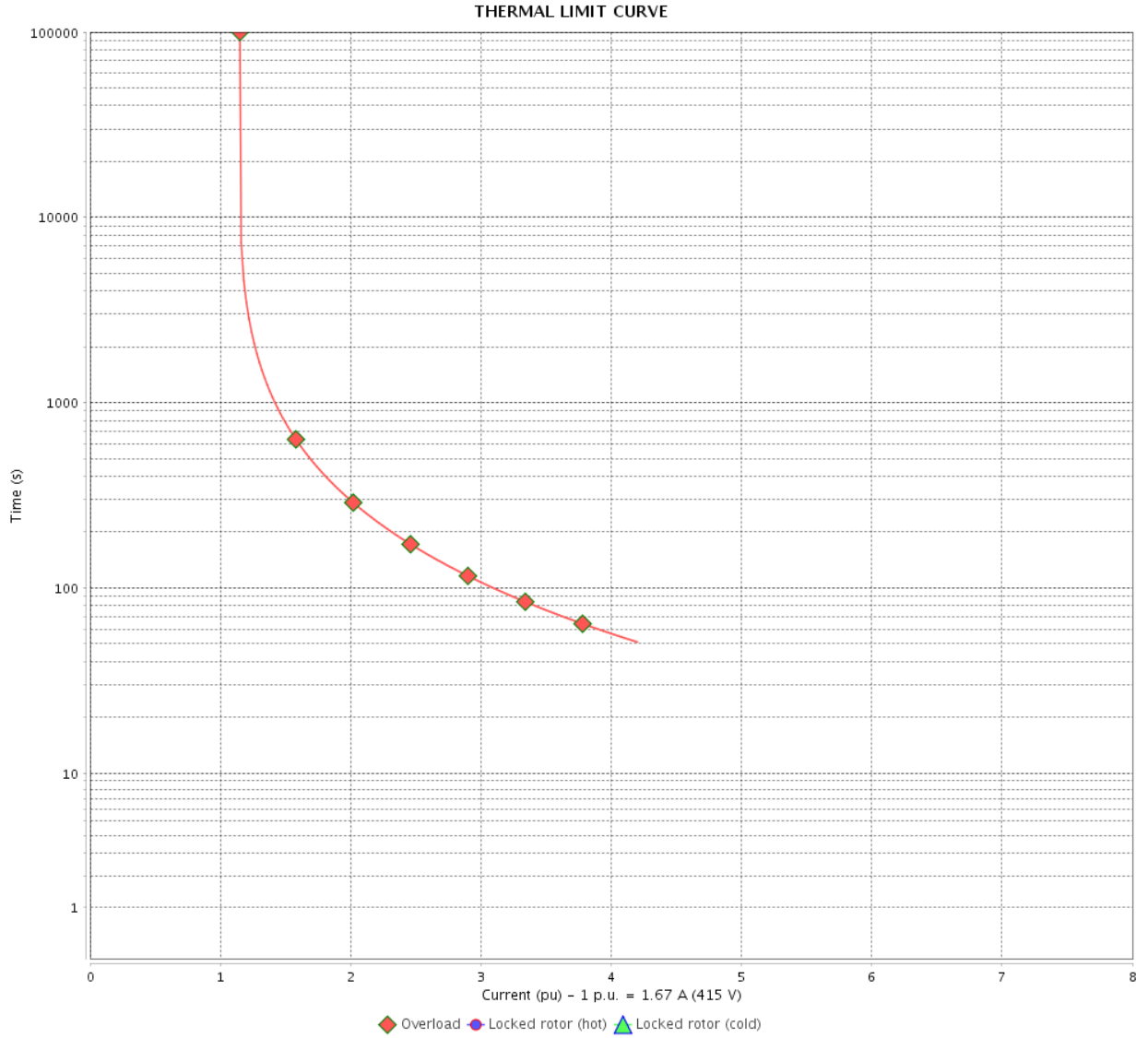
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Three Phase Induction Motor - Squirrel Cage



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



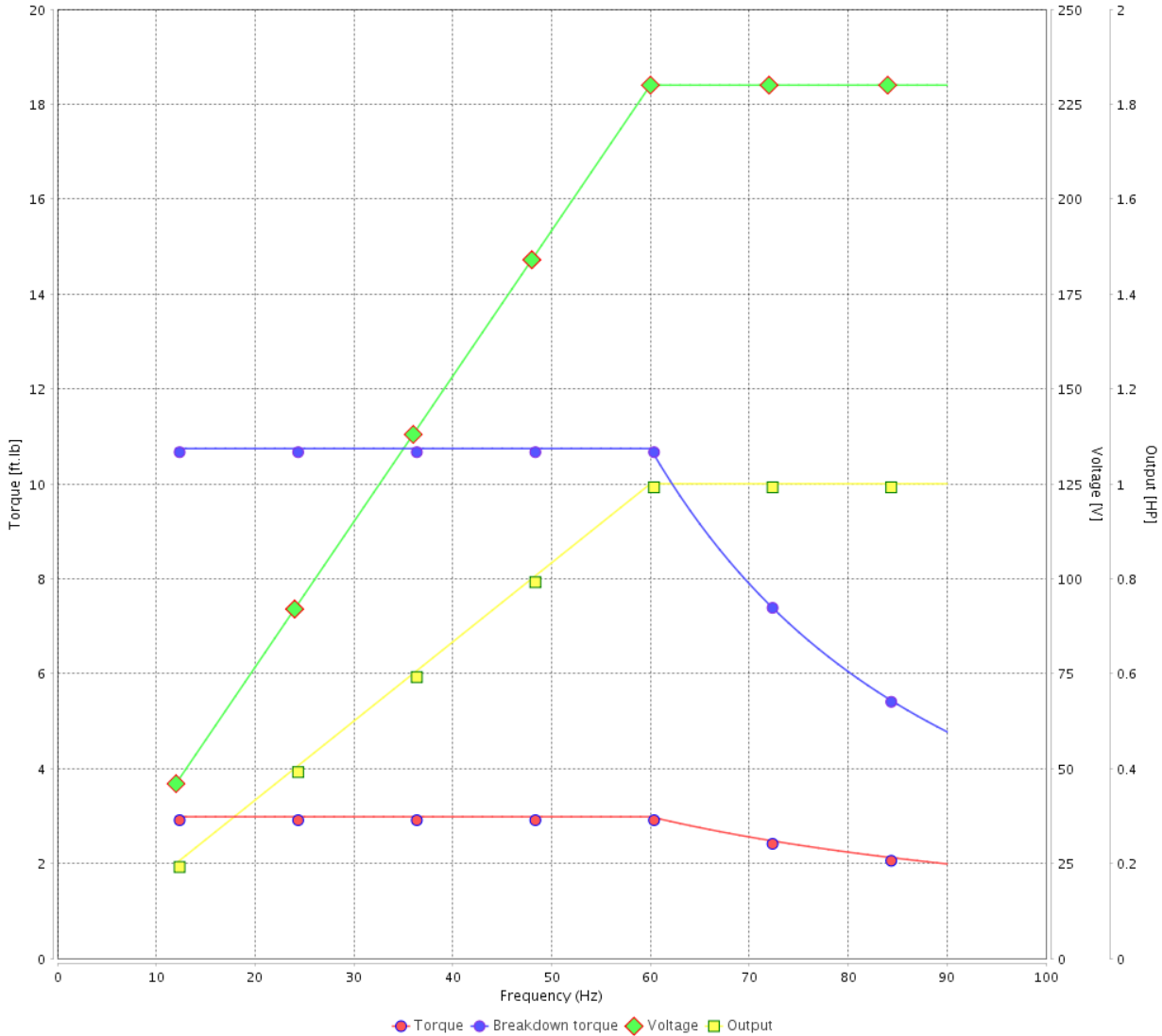
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VFD OPERATION CURVE



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 LRC : 8.0
 Rated torque : 2.98 ft.lb
 Locked rotor torque : 290 %
 Breakdown torque : 360 %
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.1101 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor :
 Temperature rise : 80 K
 Design : B

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VFD OPERATION CURVE

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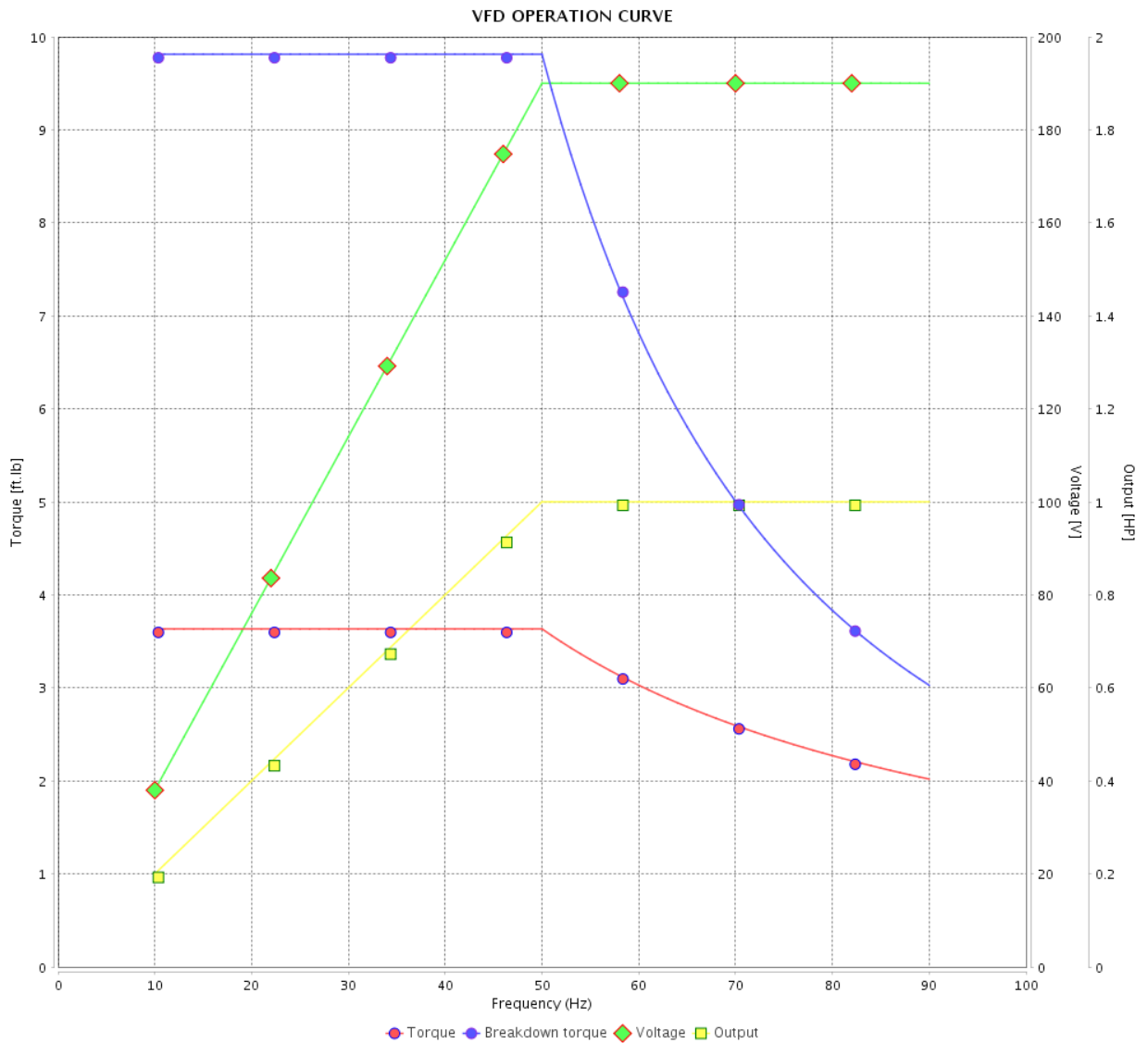


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 Design : B

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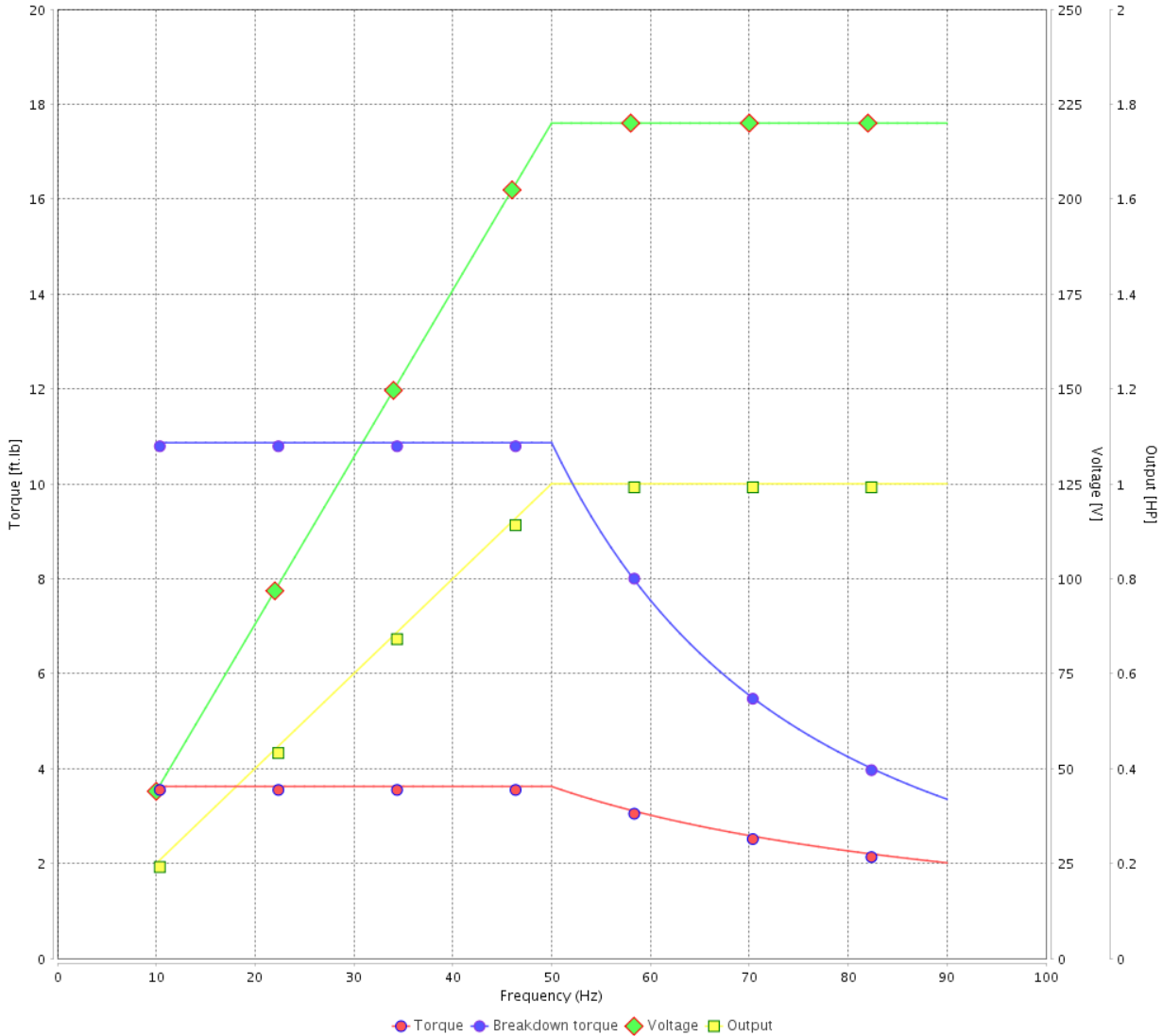
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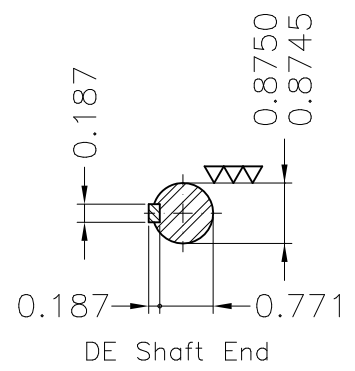
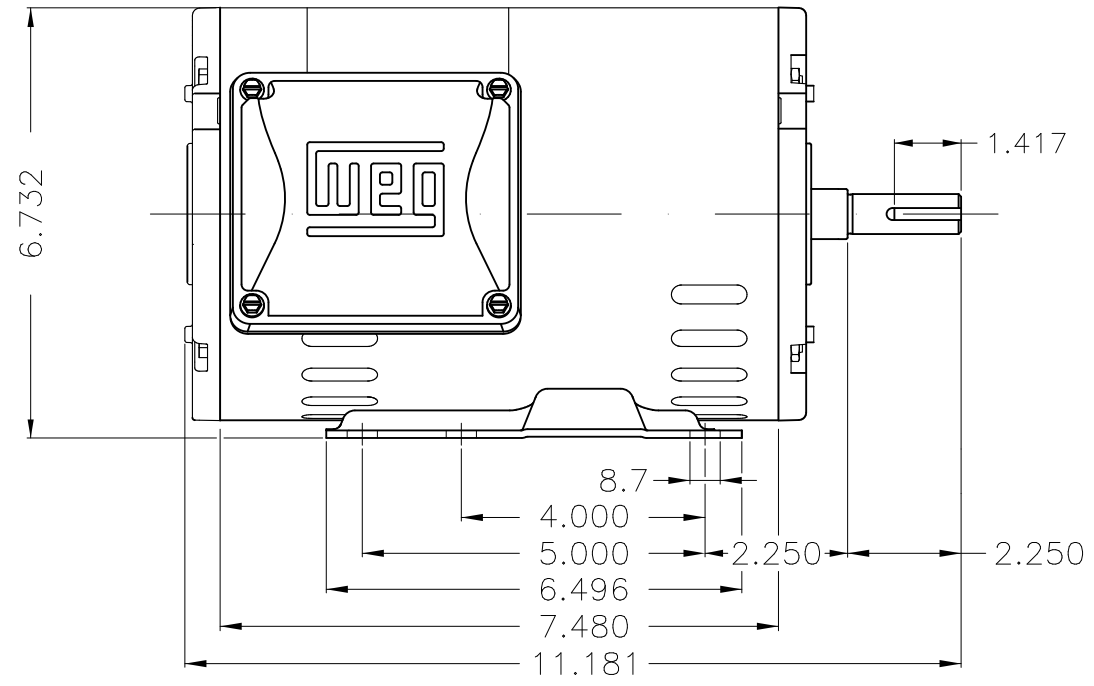
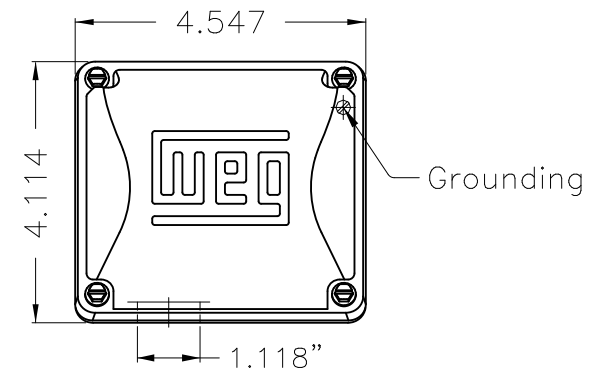
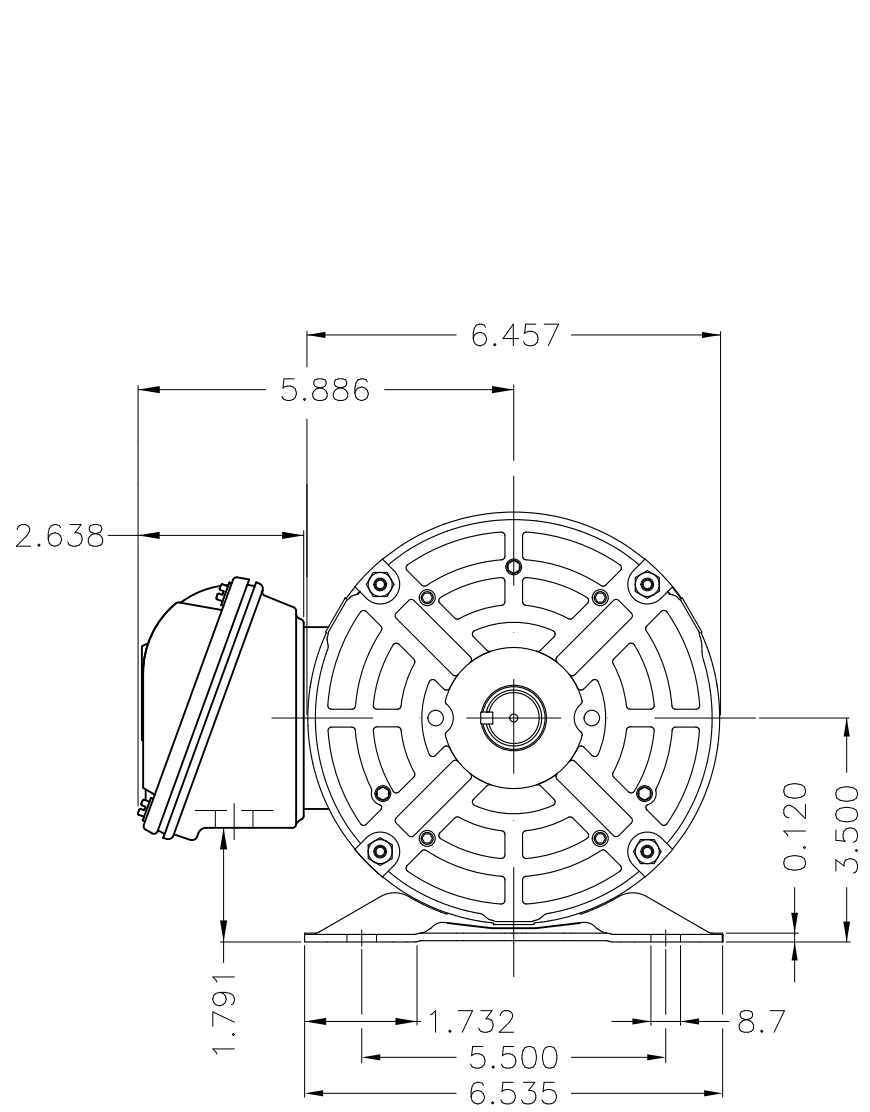
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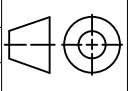
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1 2 3 4 5 6

A
B
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E

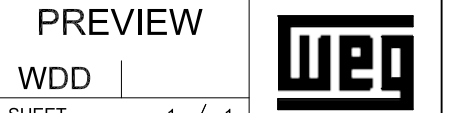


Bearing cap
 Internal AEGIS ground ring on the DE
 Color Munsell N 1 matte black
 Painting plan 207N
 Mounting F-1/B3R(D)

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PH. MOTOR ROLLED STEEL PREM. EFF. FRAME 143/5T IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

1 HP 04 Poles 60 Hz

REL DT. WMO Jaragua do Sul Product Engineering SHEET 1 / 1



Dimensions in inches XME A3



NEMA
Premium



3PT9



Energy Verified

MADE IN MEXICO

MAT: 12674953 CC029A

W01.T00IC0X0N

MODEL 001180T3E143T-SG

25MAR2022 B/N:



PH 3	Hz 60	HP 1.0
FR 143/5T		KW 0.75
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 3.02/1.51
INS CL F AT 80K		SFA 3.47/1.74
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE L	PF 0.73
USABLE @ 208V 3.34A		RPM 1760
SF1.00		NEMA NOM. EFF 85.5%

ALTERNATE RATING: 1.0HP 50Hz 190-220/380-415V SF1.15
3.44-3.15/1.72-1.67A 1445RPM EFF 82.6% (IE3) IEC 60034-1

Inverter duty motor For 80Hz use on VPWM 1000:1 VT, 5:1 CT

DE 6205-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.

