

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :				
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12687685	
		Catalog # :	01518OT3E254T-SG	
Frame	: 254/6T	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	: 190 lb	
Design	: B	Moment of inertia (J)	: 1.82 sq.ft.lb	
Output [HP]	15	15	15	
Poles	4	4	4	
Frequency [Hz]	60	50	50	
Rated voltage [V]	230/460	190/380	220/415	
Rated current [A]	37.2/18.6	43.8/21.9	40.0/21.2	
L. R. Amperes [A]	249/125	237/118	236/125	
LRC [A]	6.7x(Code H)	5.4x(Code F)	5.9x(Code G)	
No load current [A]	19.0/9.50	17.3/8.67	18.3/9.68	
Rated speed [RPM]	1775	1465	1470	
Slip [%]	1.39	2.33	2.00	
Rated torque [ft.lb]	44.4	53.8	53.6	
Locked rotor torque [%]	240	170	200	
Breakdown torque [%]	300	220	250	
Service factor	1.15	1.15	1.15	
Temperature rise	80 K	80 K	80 K	
Locked rotor time	30s (cold) 17s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)	
Noise level ²	64.0 dB(A)	62.0 dB(A)	62.0 dB(A)	
Efficiency (%)	25%	91.0	91.4	
	50%	91.7	90.8	
	75%	92.4	91.1	
	100%	93.0	90.2	
Power Factor	25%	0.36	0.40	
	50%	0.62	0.66	
	75%	0.73	0.78	
	100%	0.80	0.83	
Bearing type	: <u>Drive end</u> 6309 Z C3 <u>Non drive end</u> 6208 Z C3	Foundation loads		
Sealing	: Without Without Bearing Seal Bearing Seal	Max. traction	: 547 lb	
Lubrication interval	: 20000 h 20000 h	Max. compression	: 737 lb	
Lubricant amount	: 13 g 8 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 41.1A SF 1.00 SFA 41.1A				
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



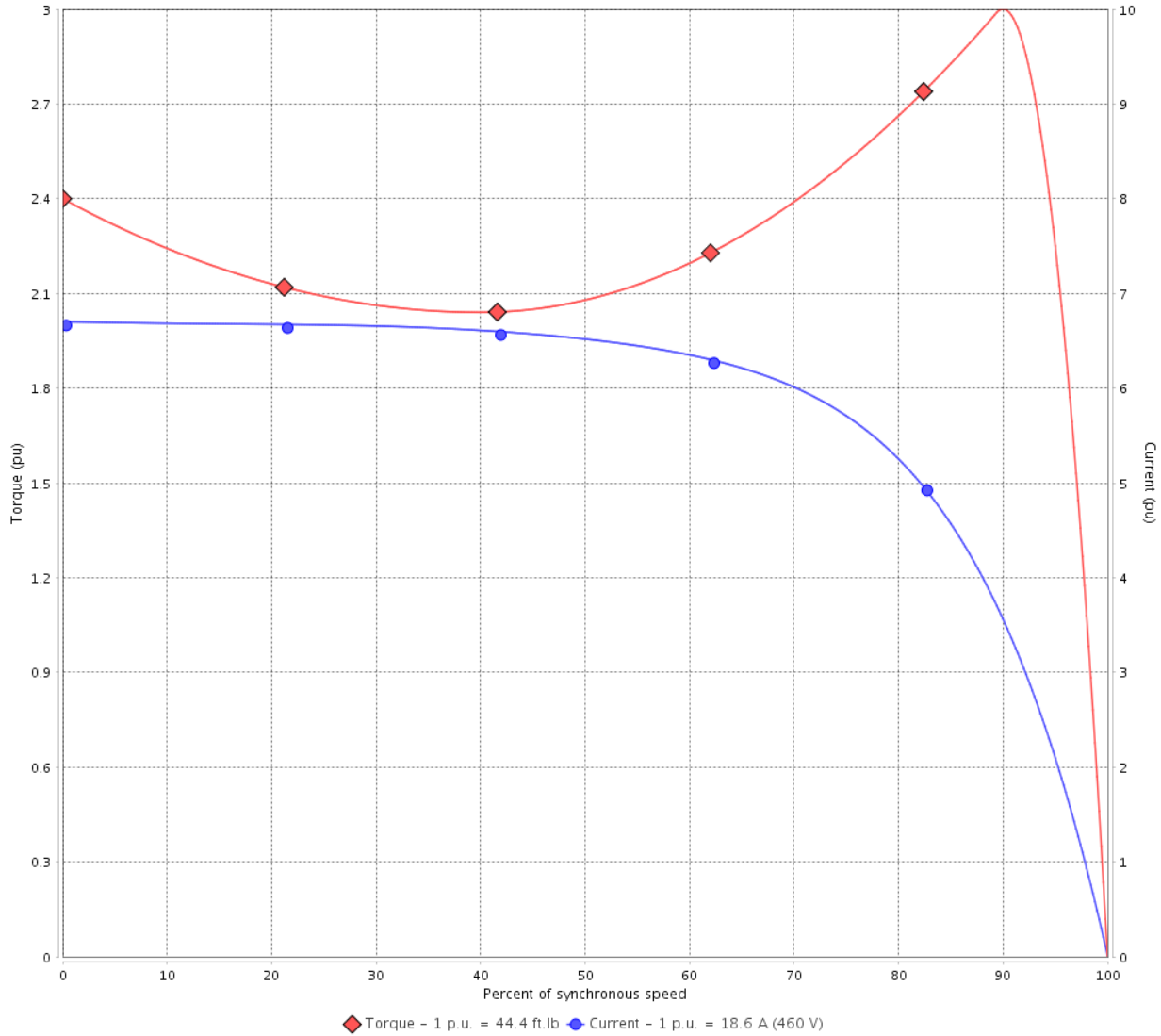
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12687685

Catalog # : 01518OT3E254T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 4P

Rated current : 37.2/18.6 A
 LRC : 6.7
 Rated torque : 44.4 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 1.82 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



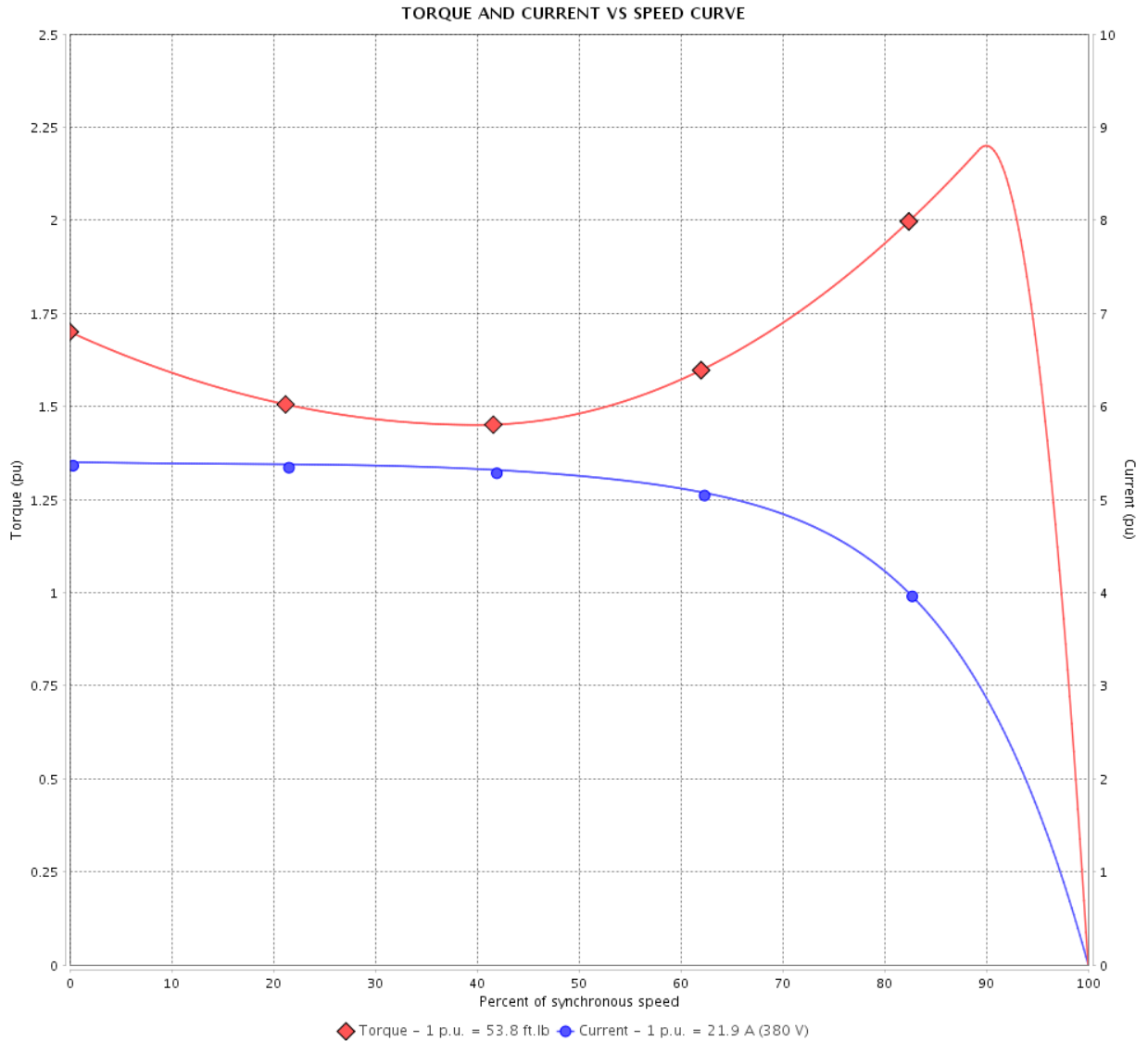
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12687685

Catalog # : 01518OT3E254T-SG



Performance : 190/380 V 50 Hz 4P

Rated current : 43.8/21.9 A
 LRC : 5.4
 Rated torque : 53.8 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 220 %
 Rated speed : 1465 rpm

Moment of inertia (J) : 1.82 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



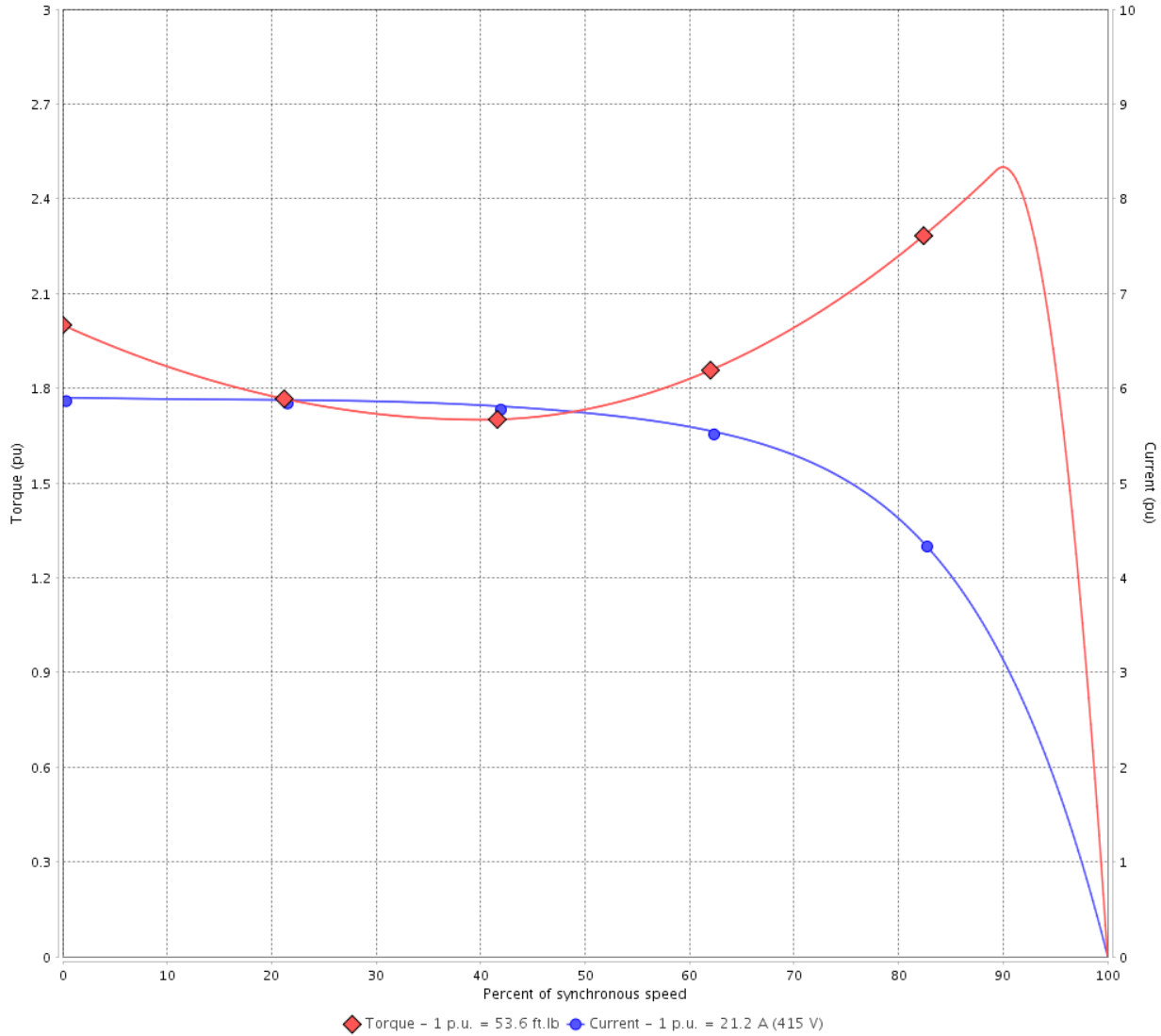
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12687685

Catalog # : 01518OT3E254T-SG

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 4P

Rated current	: 40.0/21.2 A	Moment of inertia (J)	: 1.82 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 53.6 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

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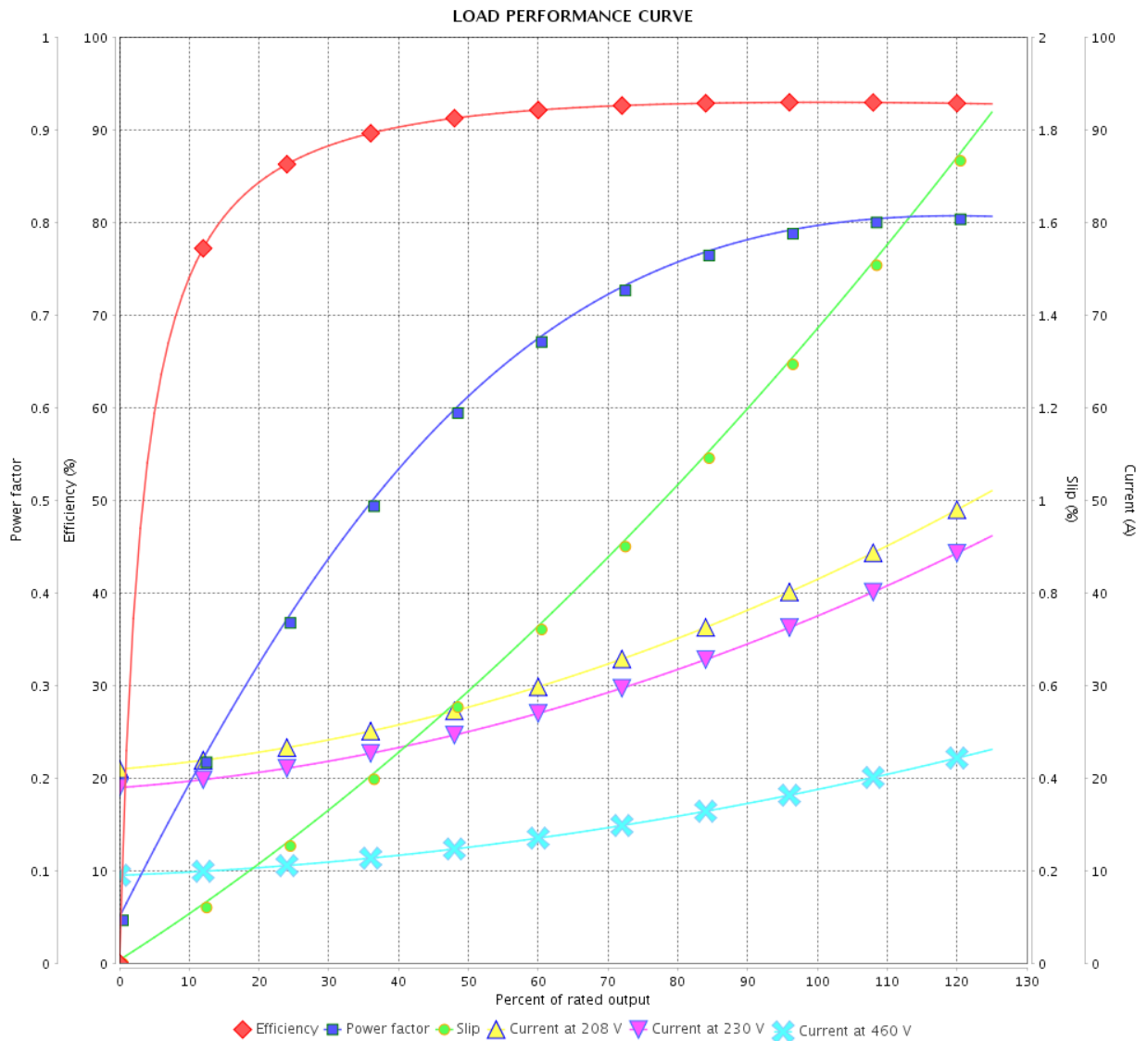


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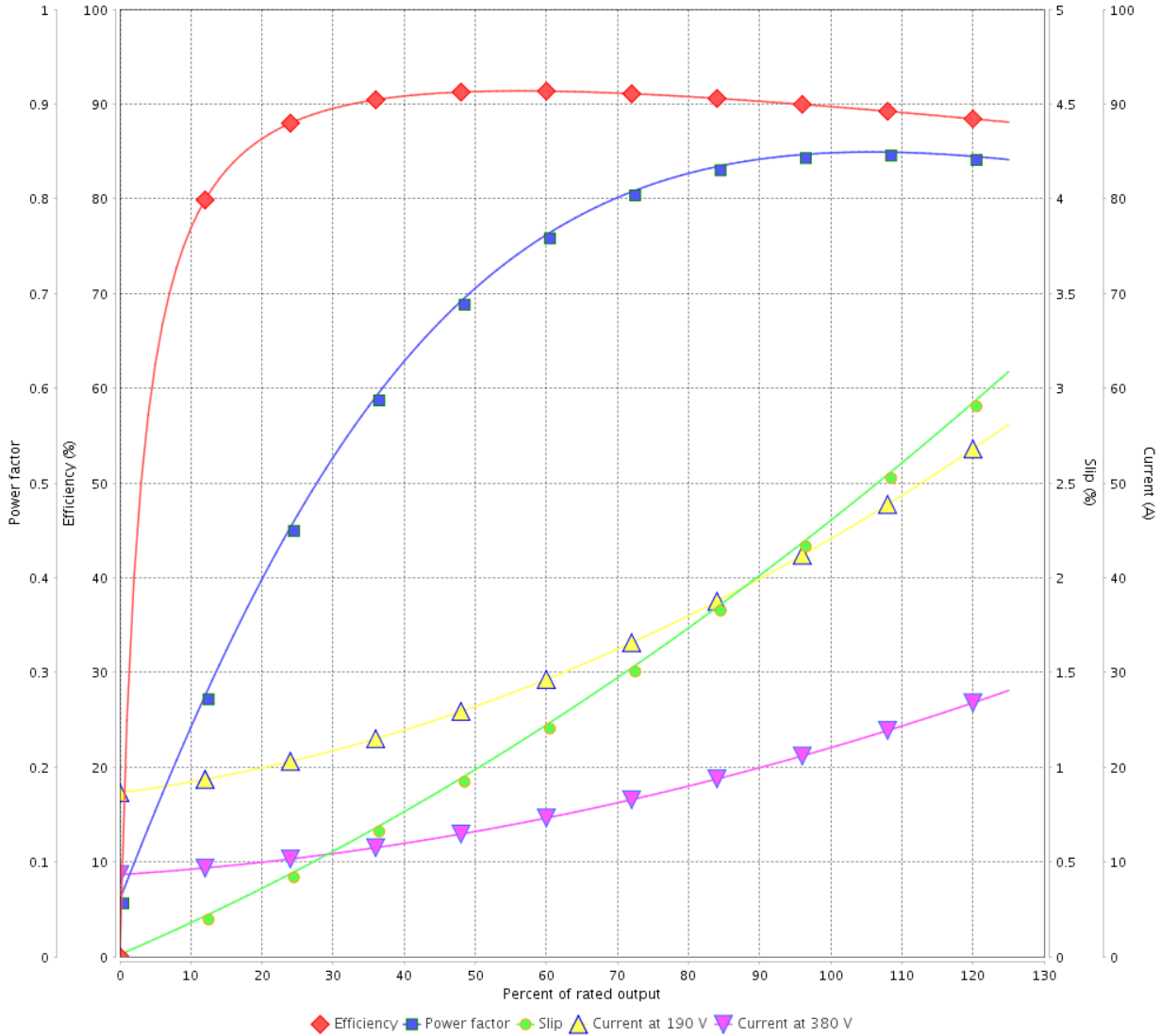
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Performance : 190/380 V 50 Hz 4P

Rated current : 43.8/21.9 A
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 Rated torque : 53.8 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 220 %
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 Duty cycle : Cont.(S1)
 Insulation class : F
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 Temperature rise : 80 K
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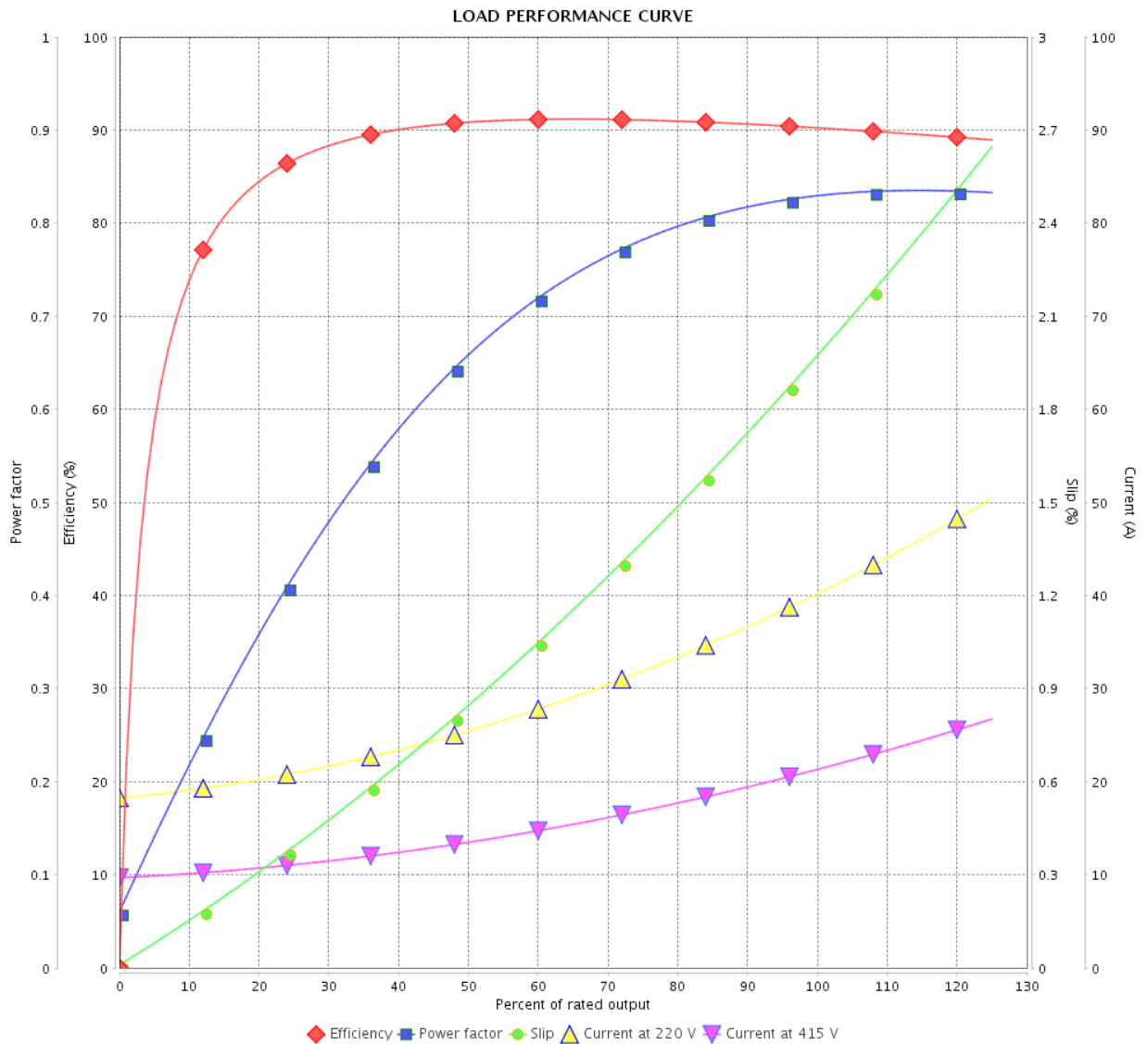


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Performance : 220/415 V 50 Hz 4P

Rated current : 40.0/21.2 A
 LRC : 5.9
 Rated torque : 53.6 ft.lb
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 1.82 sq.ft.lb
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THERMAL LIMIT CURVE



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Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Heating constant

Cooling constant

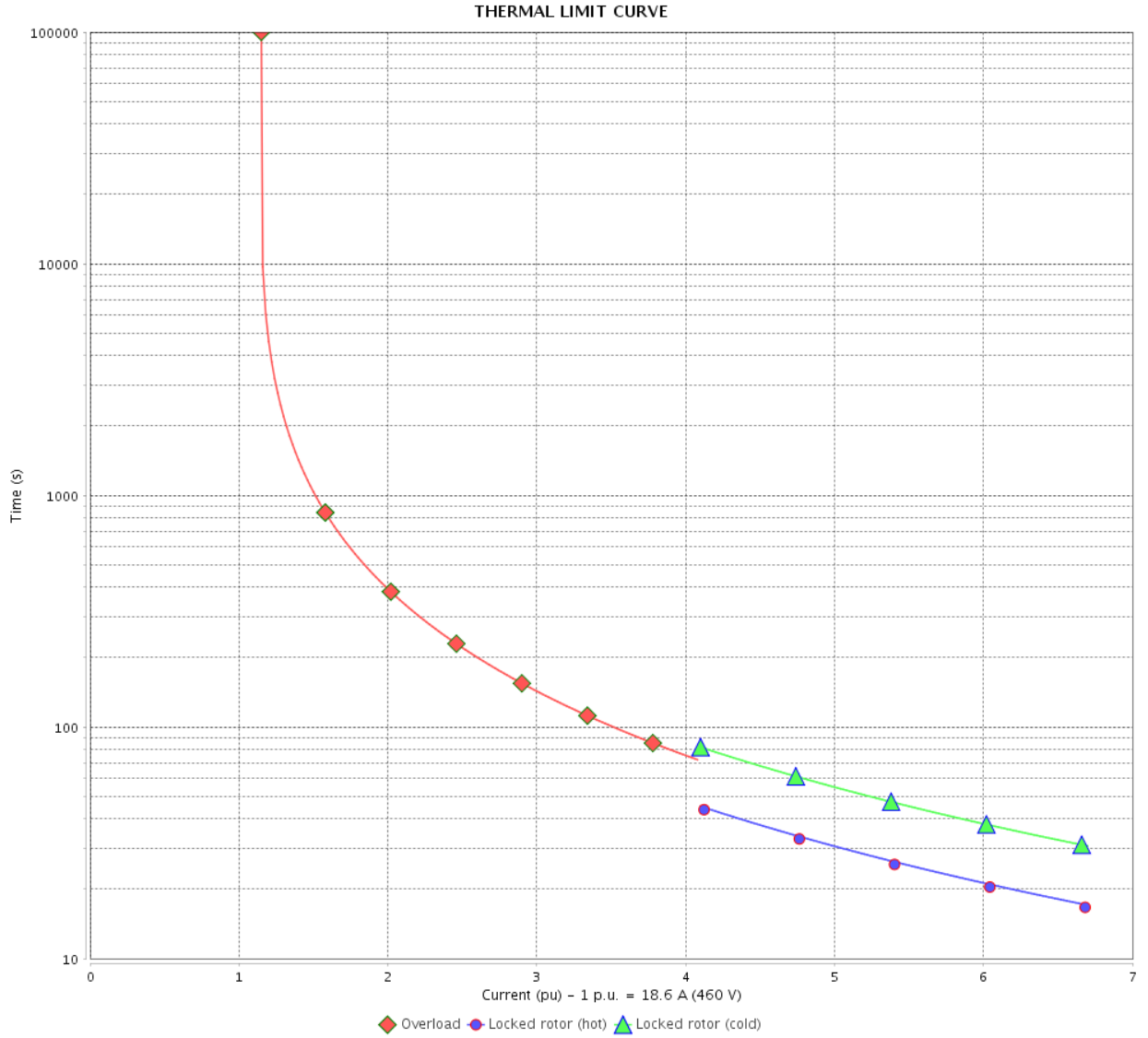
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Three Phase Induction Motor - Squirrel Cage



Customer : _____



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Date				

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Rated current	: 43.8/21.9 A	Moment of inertia (J)	: 1.82 sq.ft.lb
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 53.8 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

Heating constant

Cooling constant

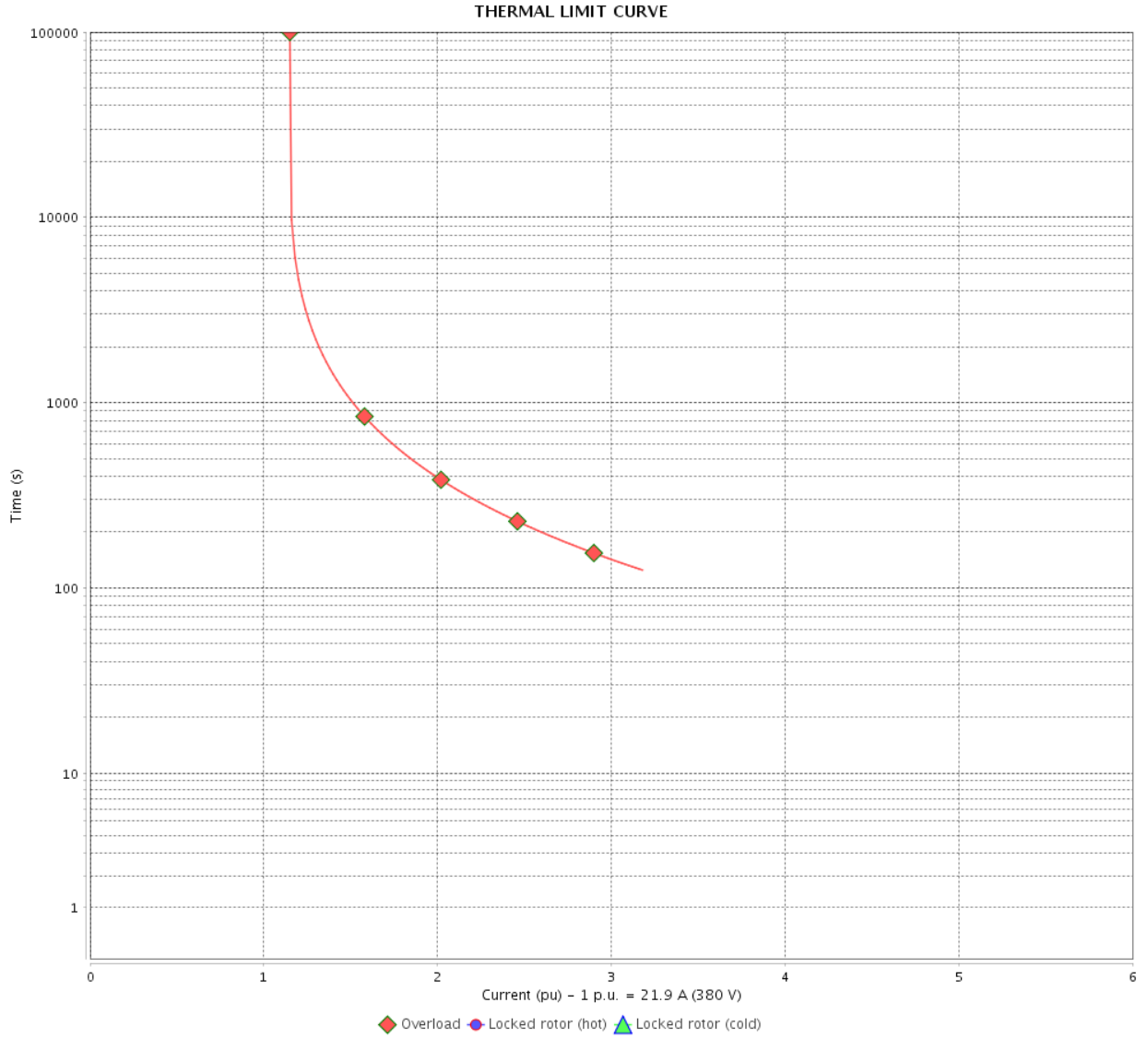
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LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 53.6 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
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Rated speed	: 1470 rpm	Design	: B

Heating constant

Cooling constant

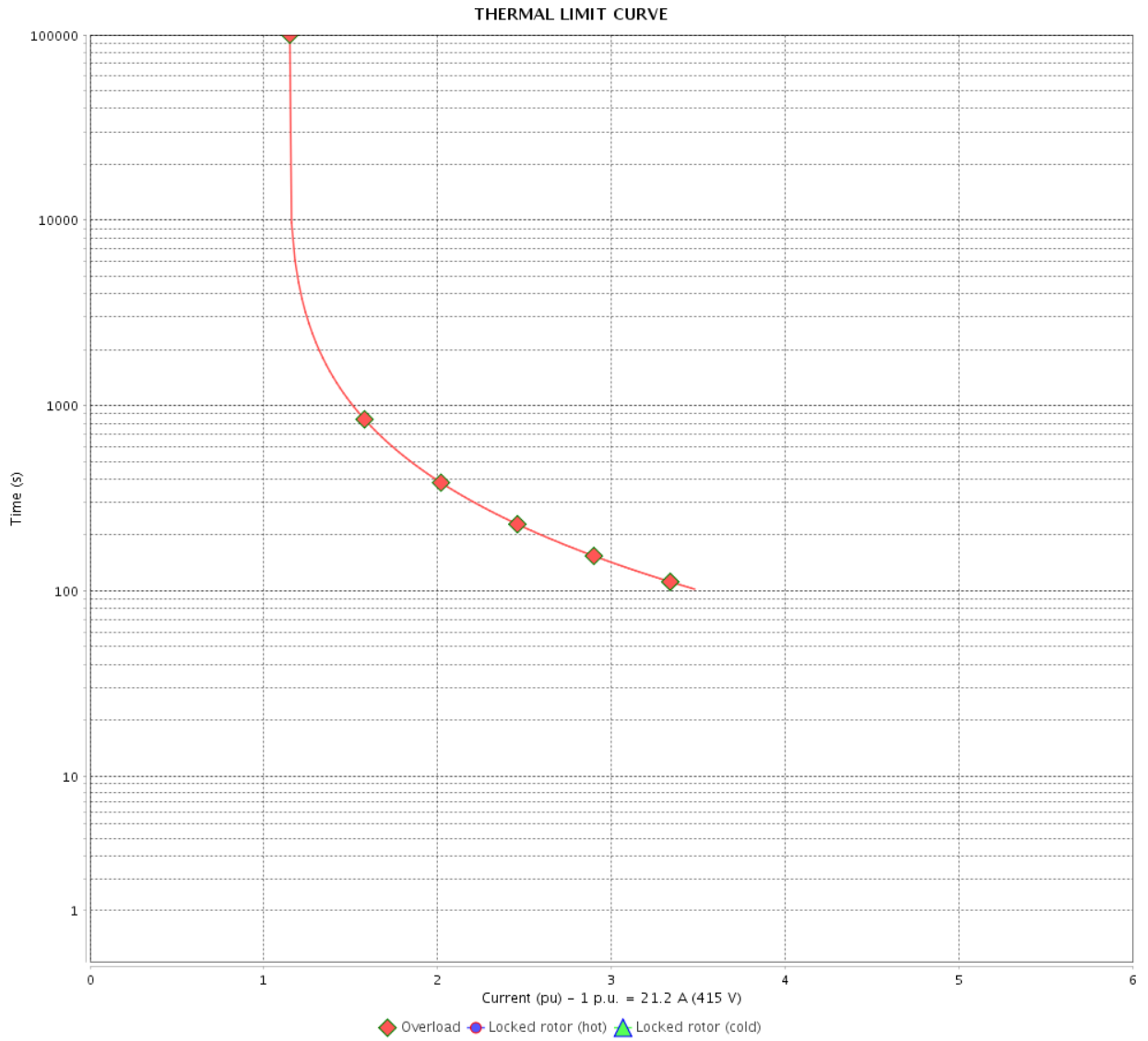
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VFD OPERATION CURVE

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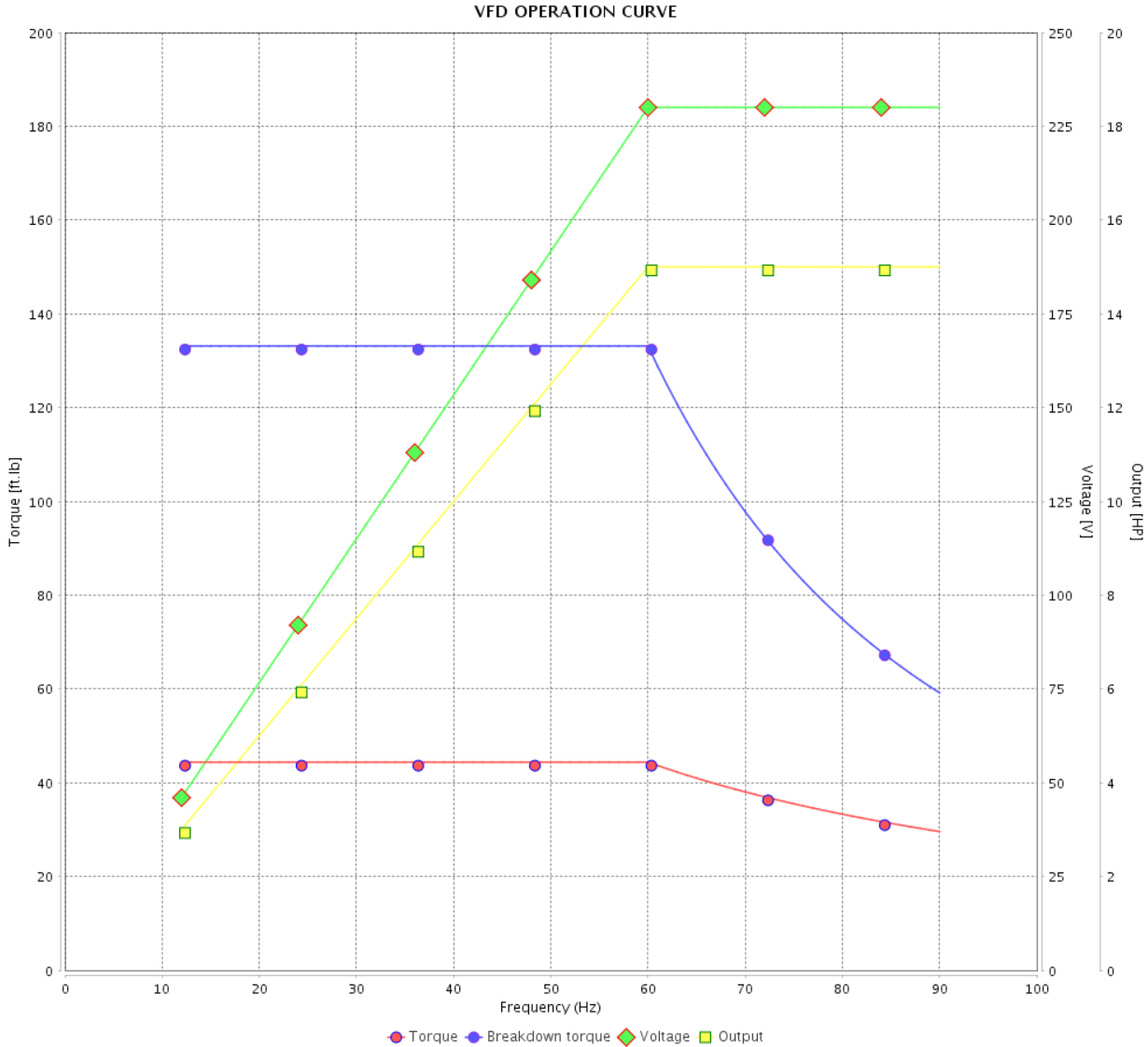


Customer :

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Product code : 12687685

Catalog # : 015180T3E254T-SG



Performance : 230/460 V 60 Hz 4P

Rated current : 37.2/18.6 A
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 Rated torque : 44.4 ft.lb
 Locked rotor torque : 240 %
 Breakdown torque : 300 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 1.82 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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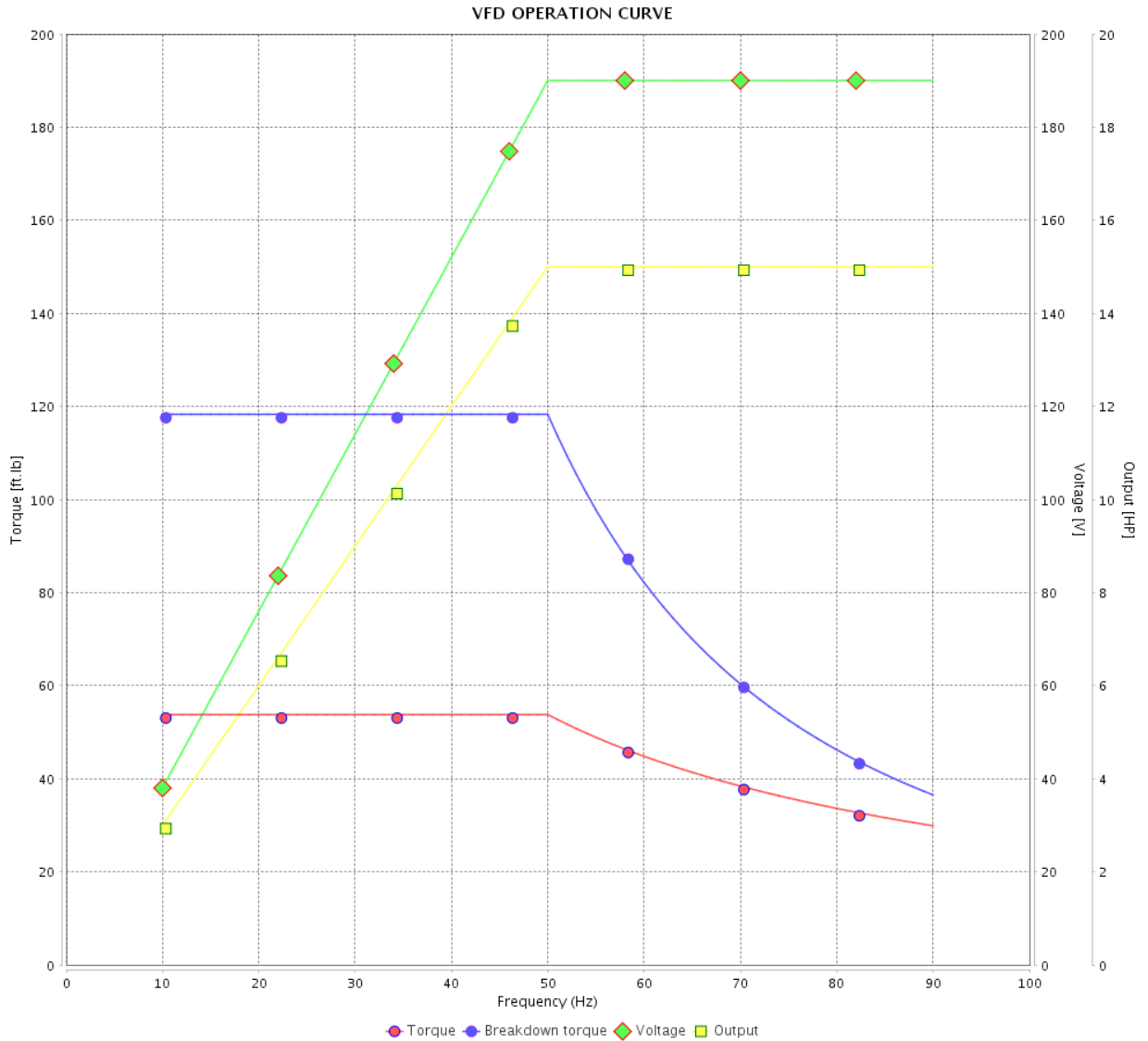


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VFD OPERATION CURVE

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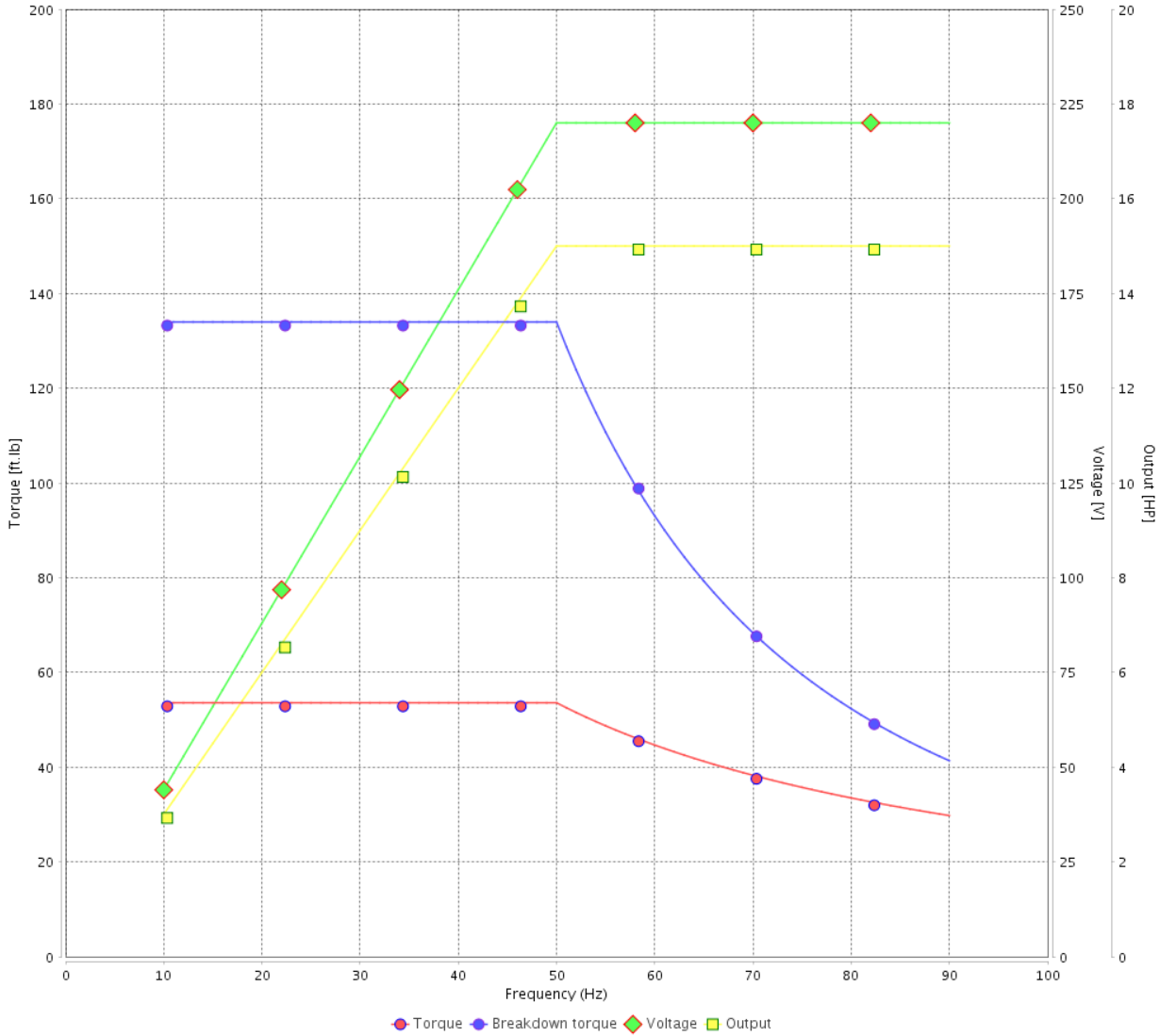
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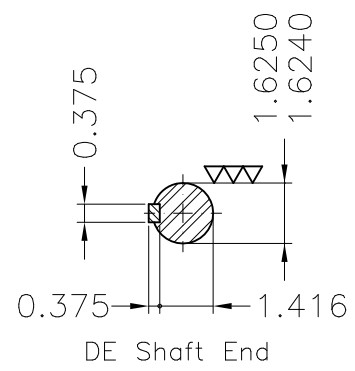
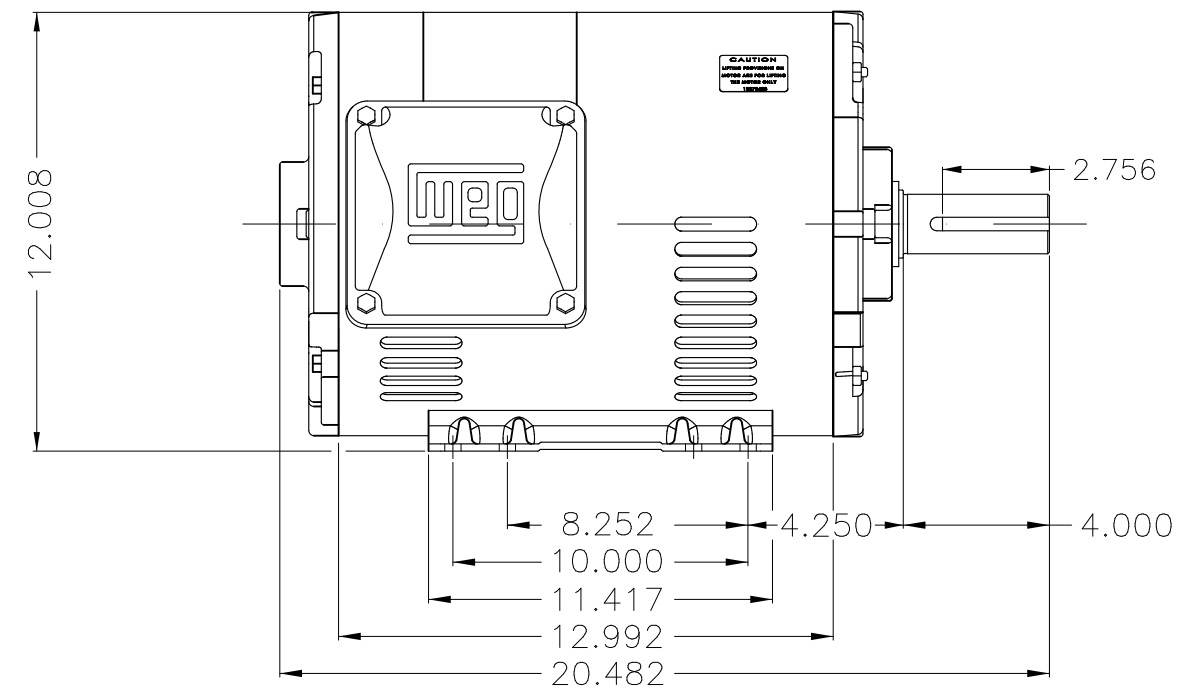
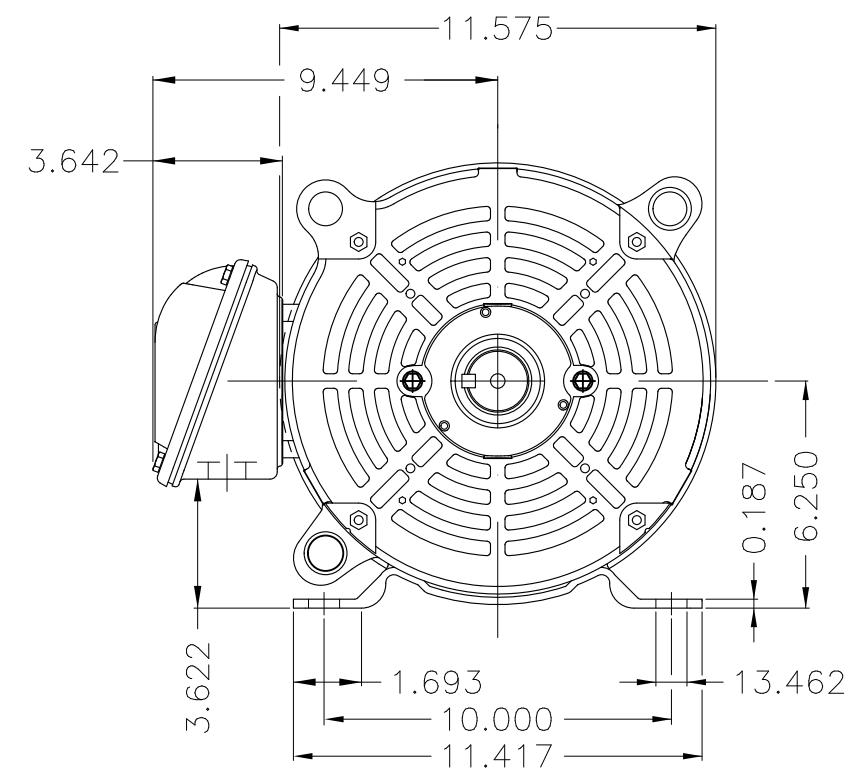
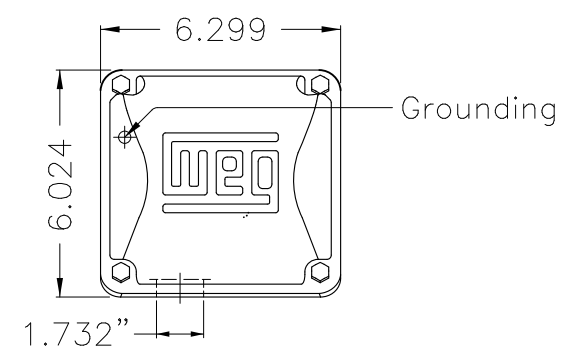
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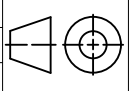
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1 2 3 4 5 6


A
B
C
D
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 254/6T IP21 ODP					
CHECKED							
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1		

15 HP 04 Poles 60 Hz

PREVIEW
 WDD


**NEMA
Premium**

MADE IN MEXICO

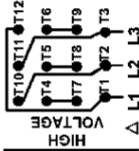
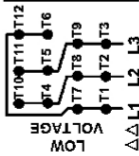
MAT: 12687685 CC029A**W01.T00IC0X0N****MODEL 015180T3E254T-SG****19APR2022 S/N:**

PH 3	Hz 60	HP 15
FR 254/6T		KW 11
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 37.2/18.6
INS CL F AT 80K		SFA 42.8/21.4
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE H	PF 0.80
USABLE @ 208V 41.1A		RPM 1775
SF1.00		NEMA NOM. EFF 93.0%

ALTERNATE RATING: 15HP 50Hz 190-220/380-415V SF1.15
43.8-39.4/21.9-20.9A 1465RPM EFF 89.7% (IE1) IEC 60034-1

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

DE 6309-Z-C3	ODE 6208-Z-C3	MOBIL POLYREX EM	20000h
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T1-BLU T2-WHT
T3-ORG T4-YEL
T5-BLK T6-GRY
T7-PNK T8-RED
T9-BRK RED
T10-CURRY
T11-GRN T12-VLT

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.

