

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: NEMA Premium Efficiency Three-Phase	Product code :	12707653
		Catalog # :	02536OT3E256TC-S
Frame	: 254/6TC	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	: 194 lb
Design	: B	Moment of inertia (J)	: 0.9155 sq.ft.lb
Output [HP]	25	25	25
Poles	2	2	2
Frequency [Hz]	60	50	50
Rated voltage [V]	230/460	190/380	220/415
Rated current [A]	58.2/29.1	70.6/35.3	64.1/34.0
L. R. Amperes [A]	367/183	374/187	378/201
LRC [A]	6.3x(Code G)	5.3x(Code E)	5.9x(Code F)
No load current [A]	22.8/11.4	22.3/11.2	24.0/12.7
Rated speed [RPM]	3530	2905	2910
Slip [%]	1.94	3.17	3.00
Rated torque [ft.lb]	37.2	45.2	45.1
Locked rotor torque [%]	180	150	170
Breakdown torque [%]	290	220	240
Service factor	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K
Locked rotor time	16s (cold) 9s (hot)	0s (cold) 0s (hot)	0s (cold) 0s (hot)
Noise level ²	70.0 dB(A)	68.0 dB(A)	68.0 dB(A)
Efficiency (%)	25%	90.8	91.9
	50%	91.0	90.9
	75%	91.7	90.6
	100%	91.7	89.3
Power Factor	25%	0.46	0.48
	50%	0.73	0.75
	75%	0.83	0.85
	100%	0.87	0.88
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	: 422 lb
Lubrication interval	: 20000 h 20000 h	Max. compression	: 616 lb
Lubricant amount	: 13 g 8 g		
Lubricant type	: Mobil Polyrex EM		
Notes USABLE @208V 64.3A SF 1.00 SFA 64.3A			
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



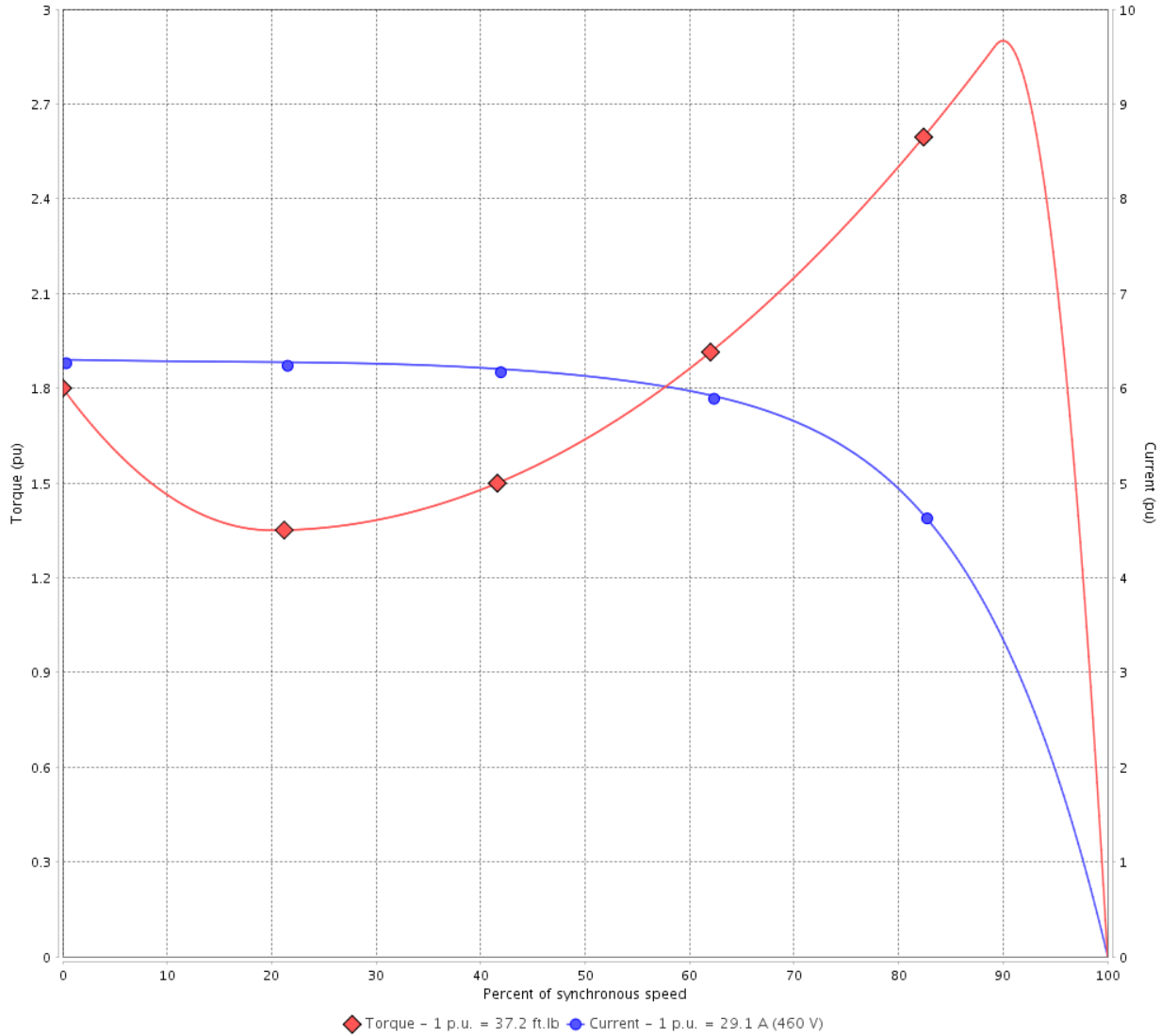
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12707653

Catalog # : 02536OT3E256TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 230/460 V 60 Hz 2P

Rated current	: 58.2/29.1 A	Moment of inertia (J)	: 0.9155 sq.ft.lb
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 37.2 ft.lb	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3530 rpm	Design	: B

Locked rotor time : 16s (cold) 9s (hot)

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TORQUE AND CURRENT VS SPEED CURVE



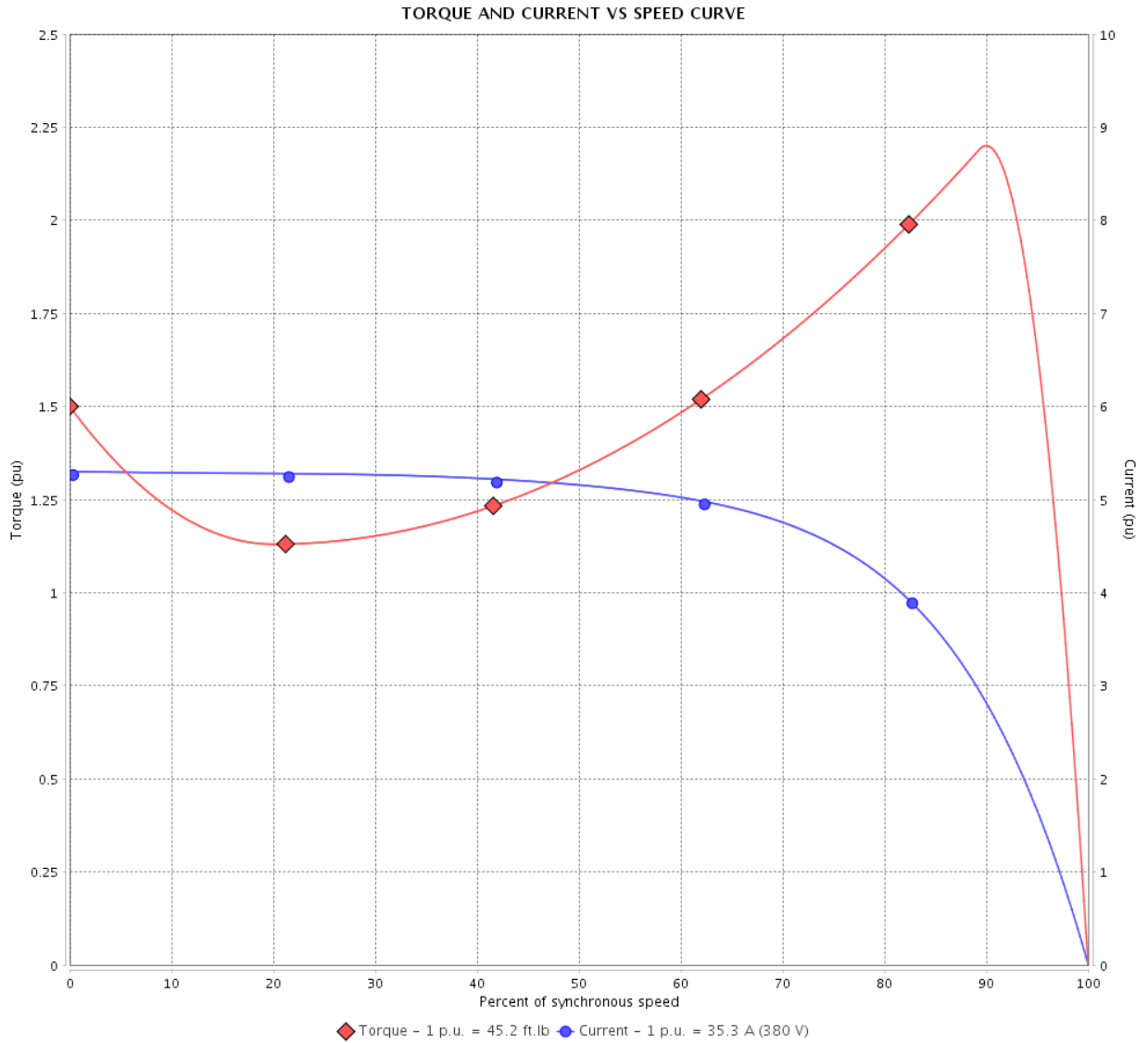
Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12707653

Catalog # : 02536OT3E256TC-S



Performance : 190/380 V 50 Hz 2P

Rated current : 70.6/35.3 A
 LRC : 5.3
 Rated torque : 45.2 ft.lb
 Locked rotor torque : 150 %
 Breakdown torque : 220 %
 Rated speed : 2905 rpm

Moment of inertia (J) : 0.9155 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



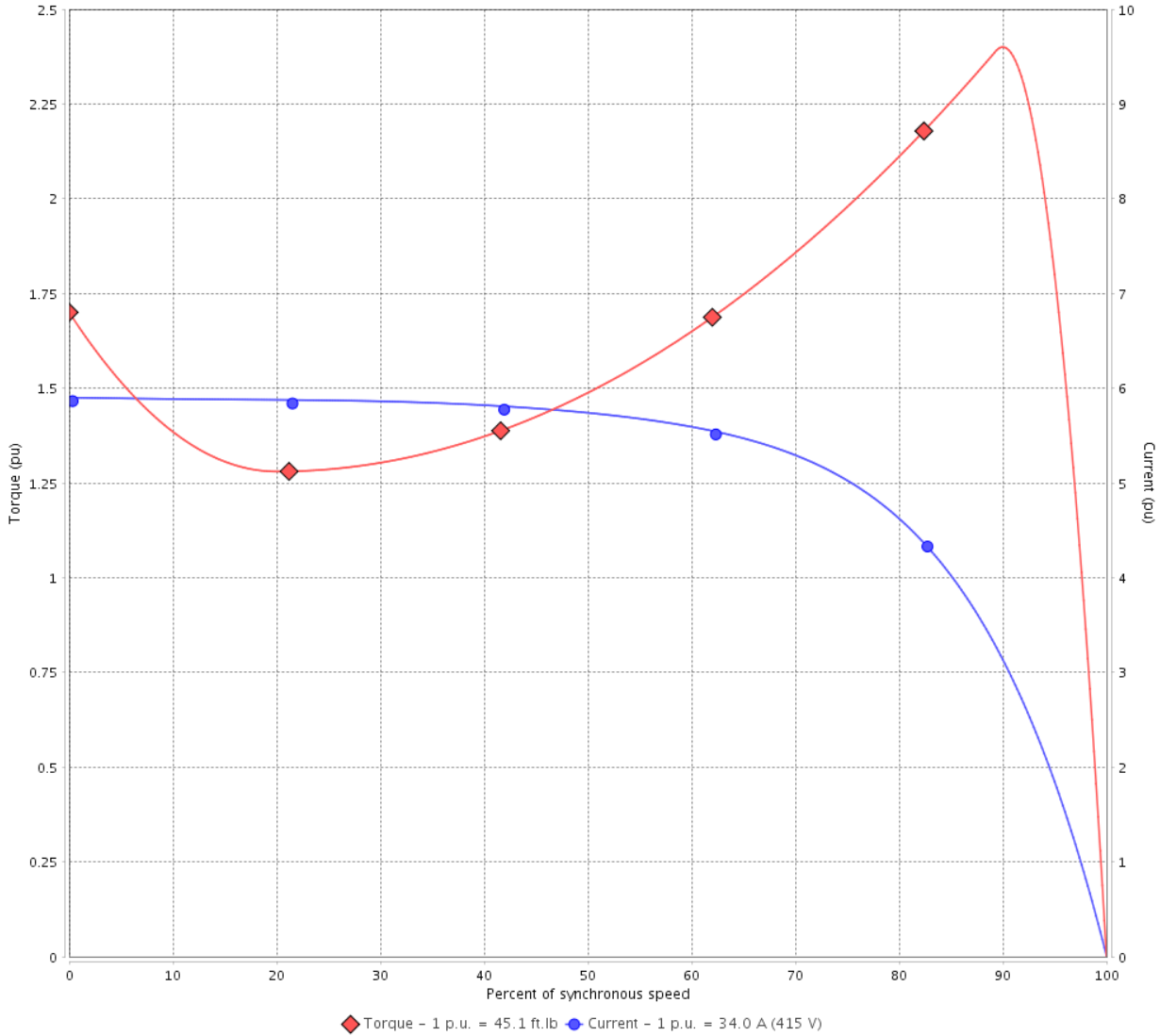
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 12707653

Catalog # : 025360T3E256TC-S

TORQUE AND CURRENT VS SPEED CURVE



Performance : 220/415 V 50 Hz 2P

Rated current	: 64.1/34.0 A	Moment of inertia (J)	: 0.9155 sq.ft.lb
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 45.1 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 2910 rpm	Design	: B

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

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

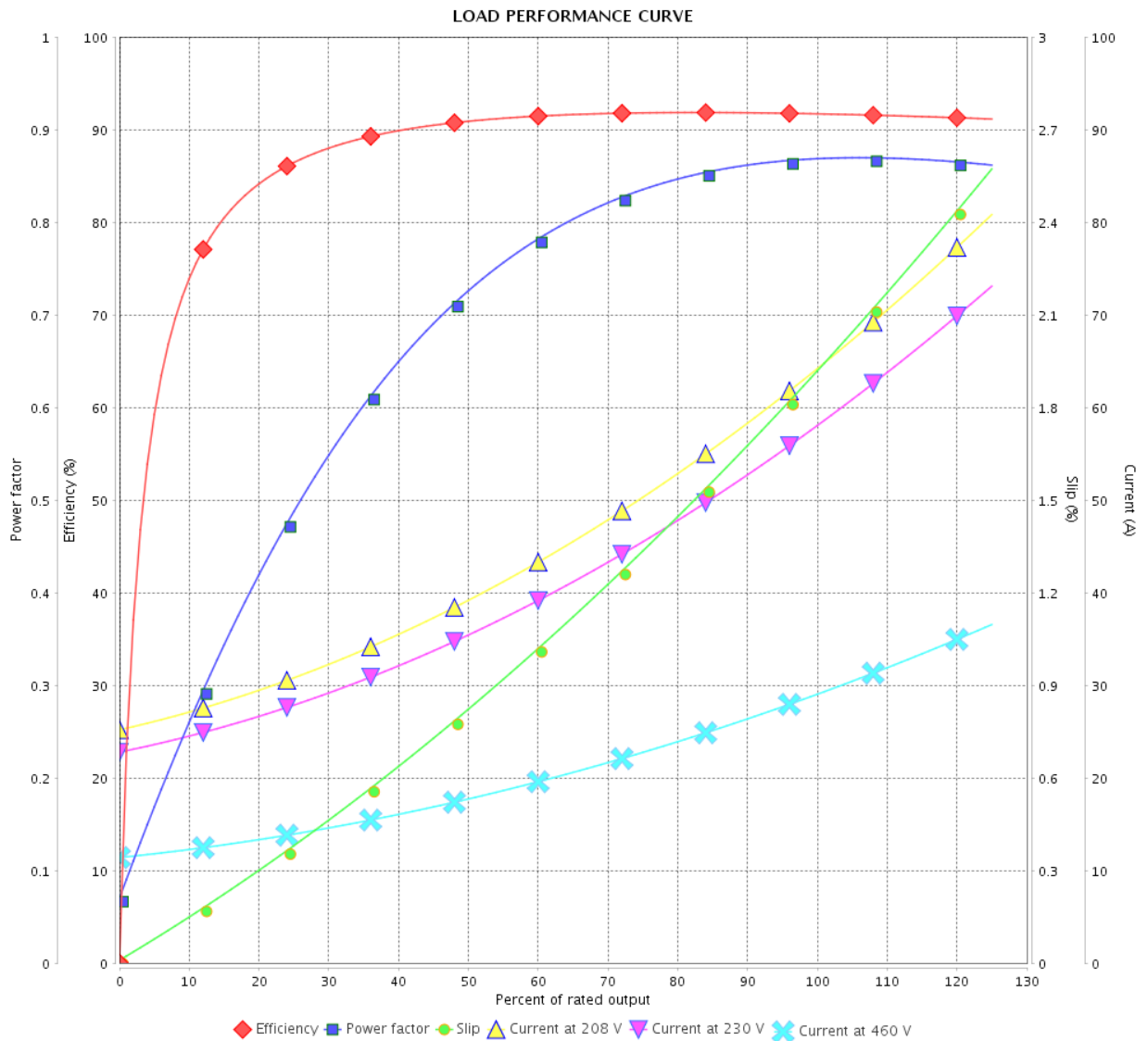


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Product code : 12707653

Catalog # : 02536OT3E256TC-S



Performance : 230/460 V 60 Hz 2P

Rated current : 58.2/29.1 A
 LRC : 6.3
 Rated torque : 37.2 ft.lb
 Locked rotor torque : 180 %
 Breakdown torque : 290 %
 Rated speed : 3530 rpm

Moment of inertia (J) : 0.9155 sq.ft.lb
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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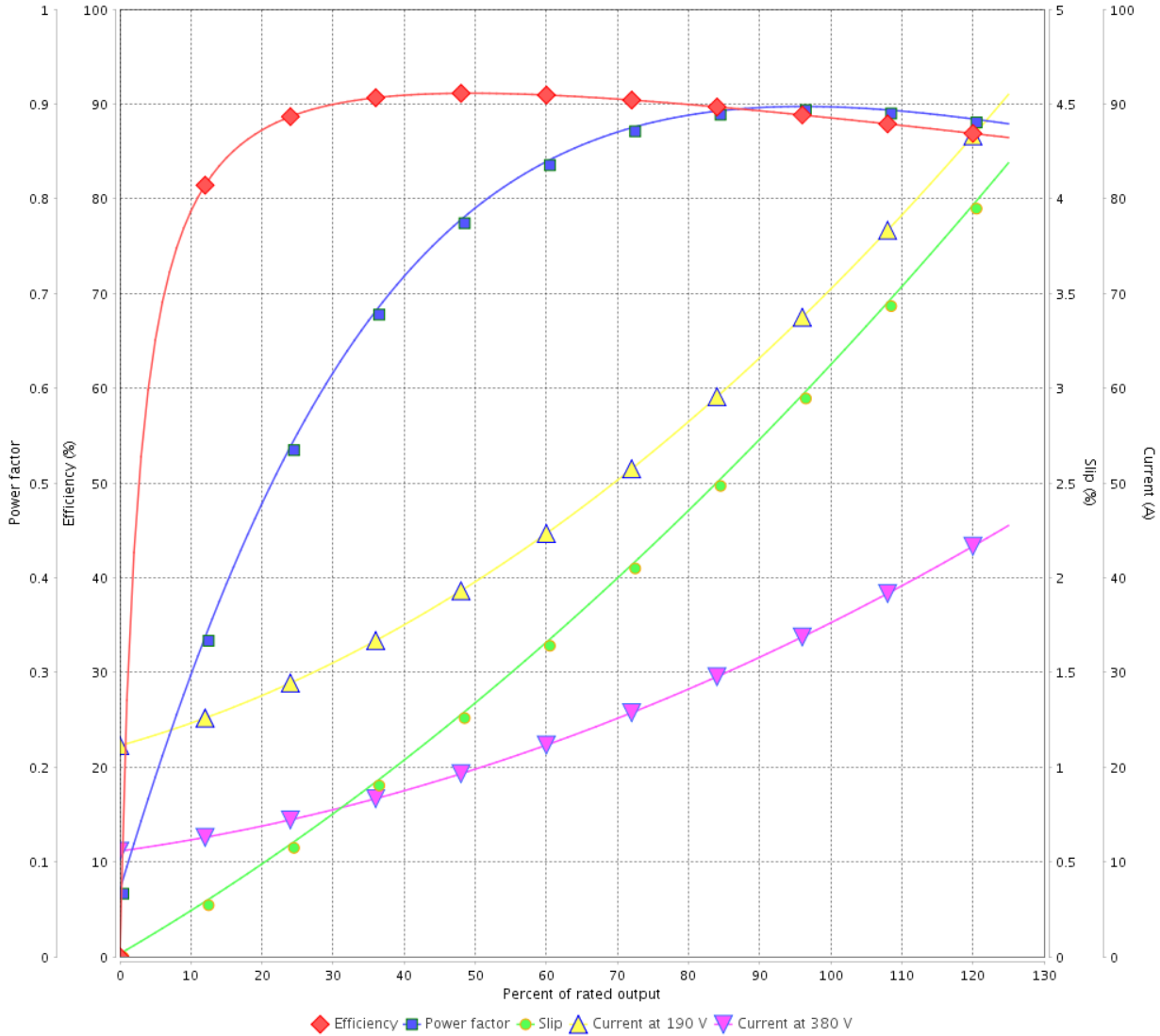
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LOAD PERFORMANCE CURVE



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 Rated speed : 2905 rpm

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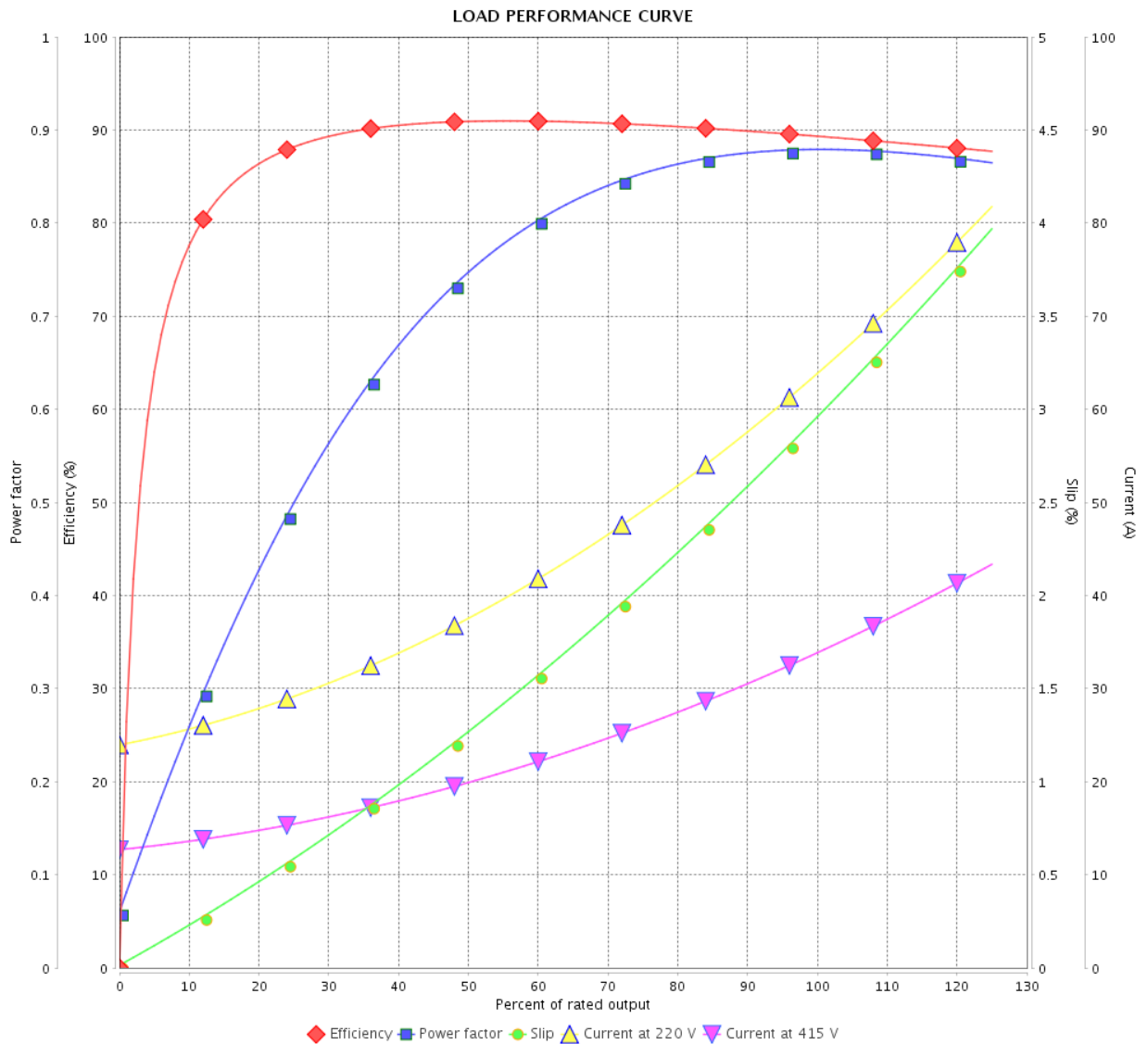


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Catalog # : 02536OT3E256TC-S



Performance : 220/415 V 50 Hz 2P

Rated current : 64.1/34.0 A
 LRC : 5.9
 Rated torque : 45.1 ft.lb
 Locked rotor torque : 170 %
 Breakdown torque : 240 %
 Rated speed : 2910 rpm

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THERMAL LIMIT CURVE



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Rated speed	: 3530 rpm	Design	: B

Heating constant

Cooling constant

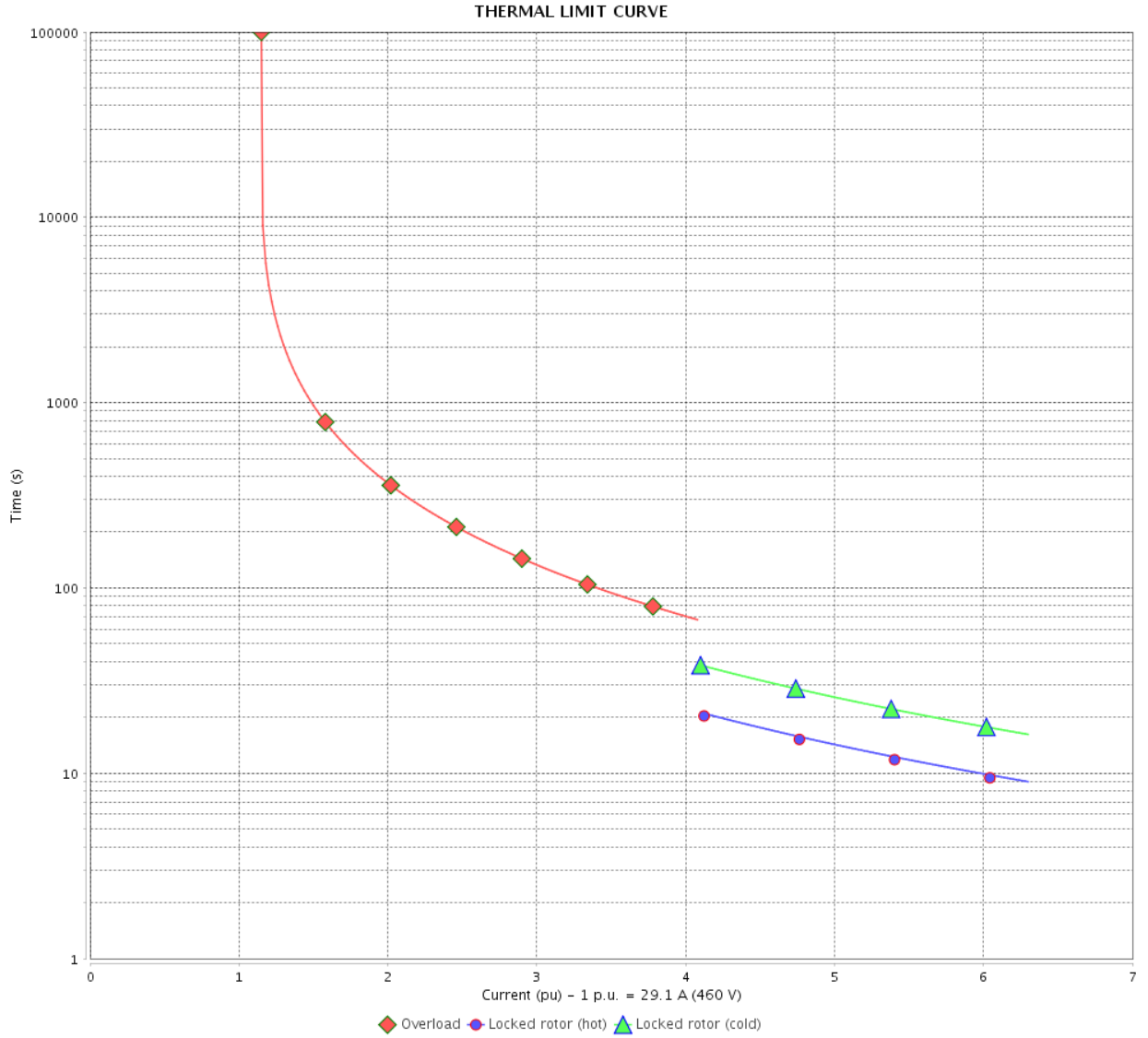
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THERMAL LIMIT CURVE

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Customer : _____



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Locked rotor torque	: 150 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 2905 rpm	Design	: B

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Cooling constant

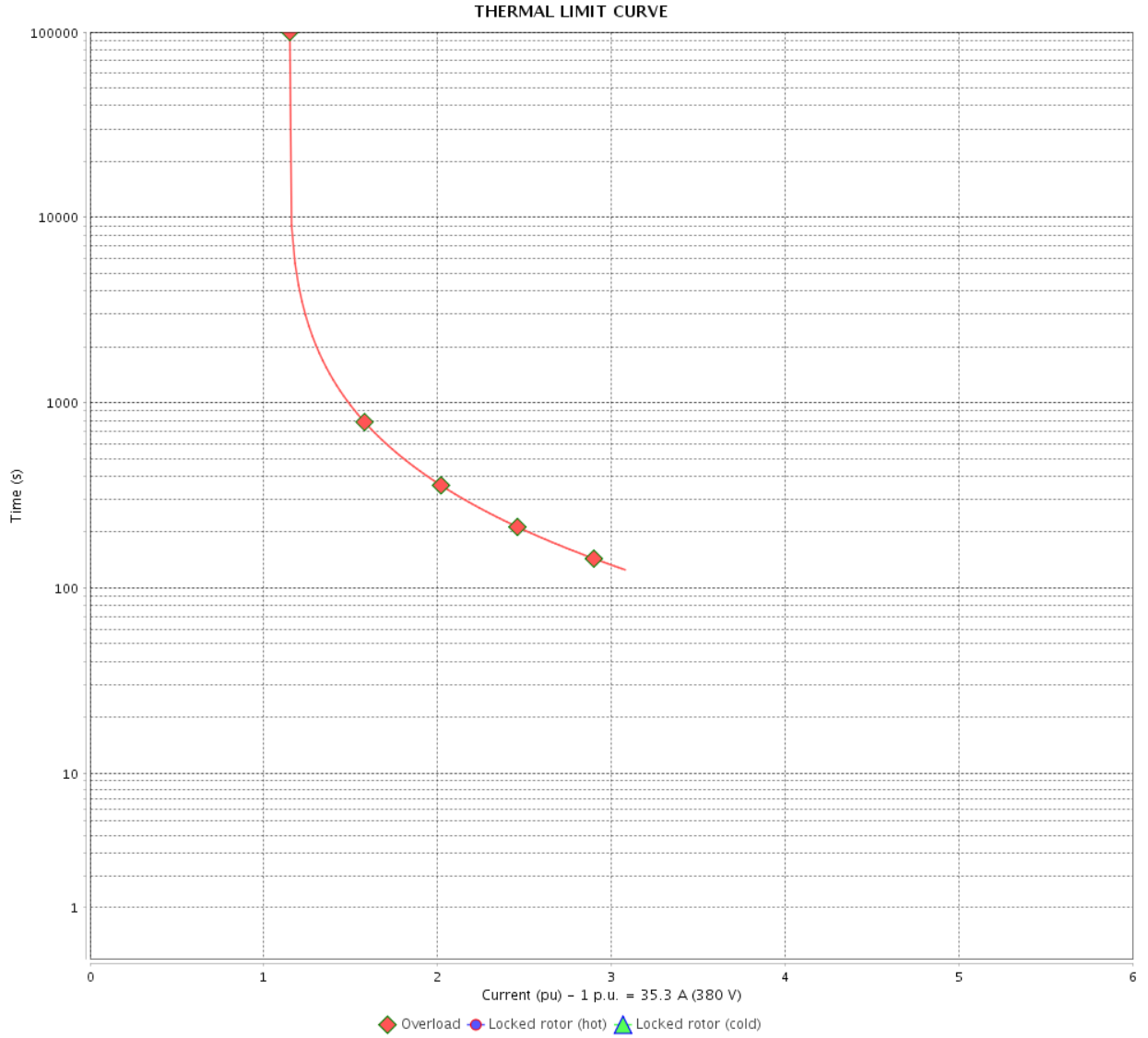
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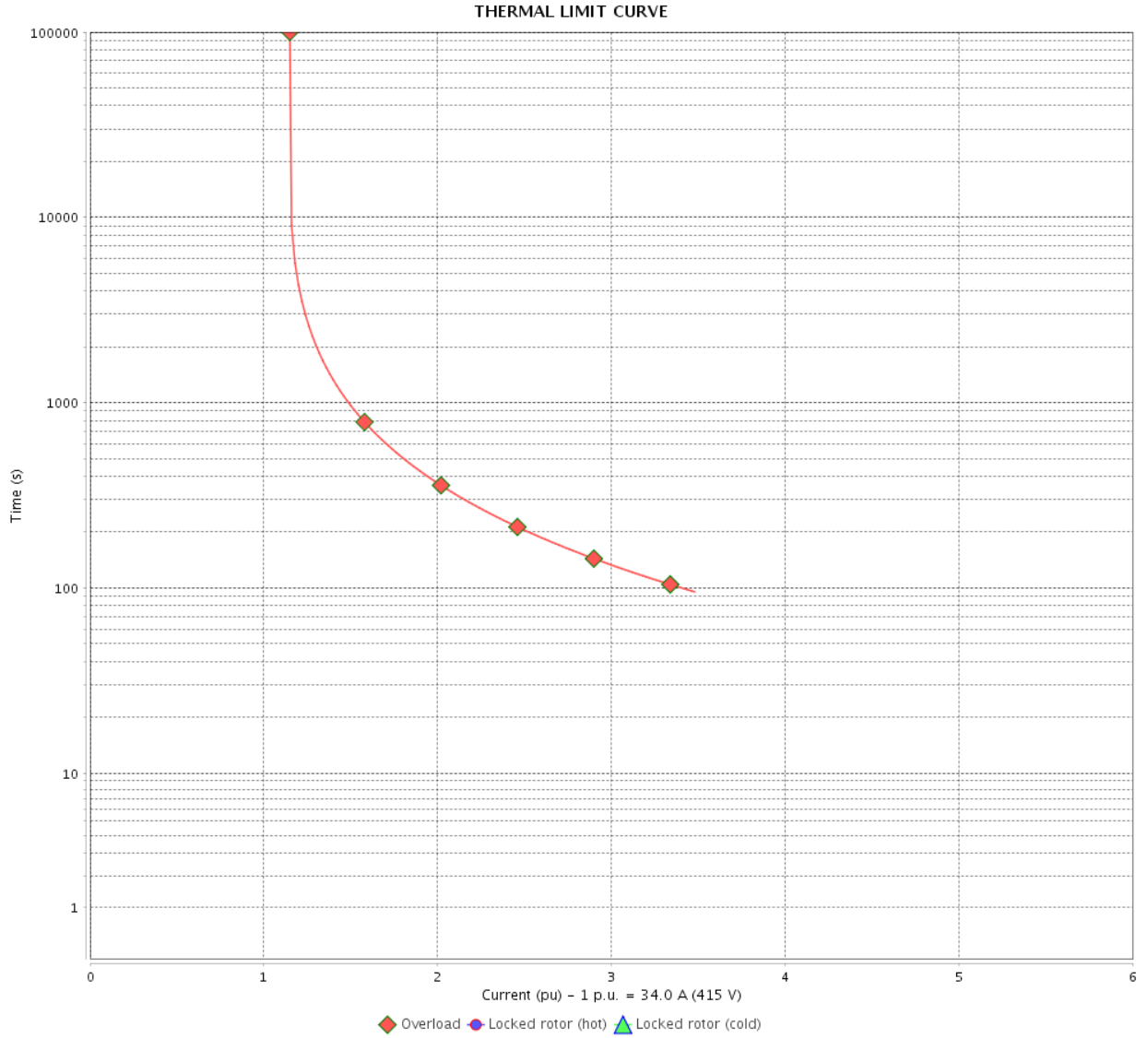
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THERMAL LIMIT CURVE

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



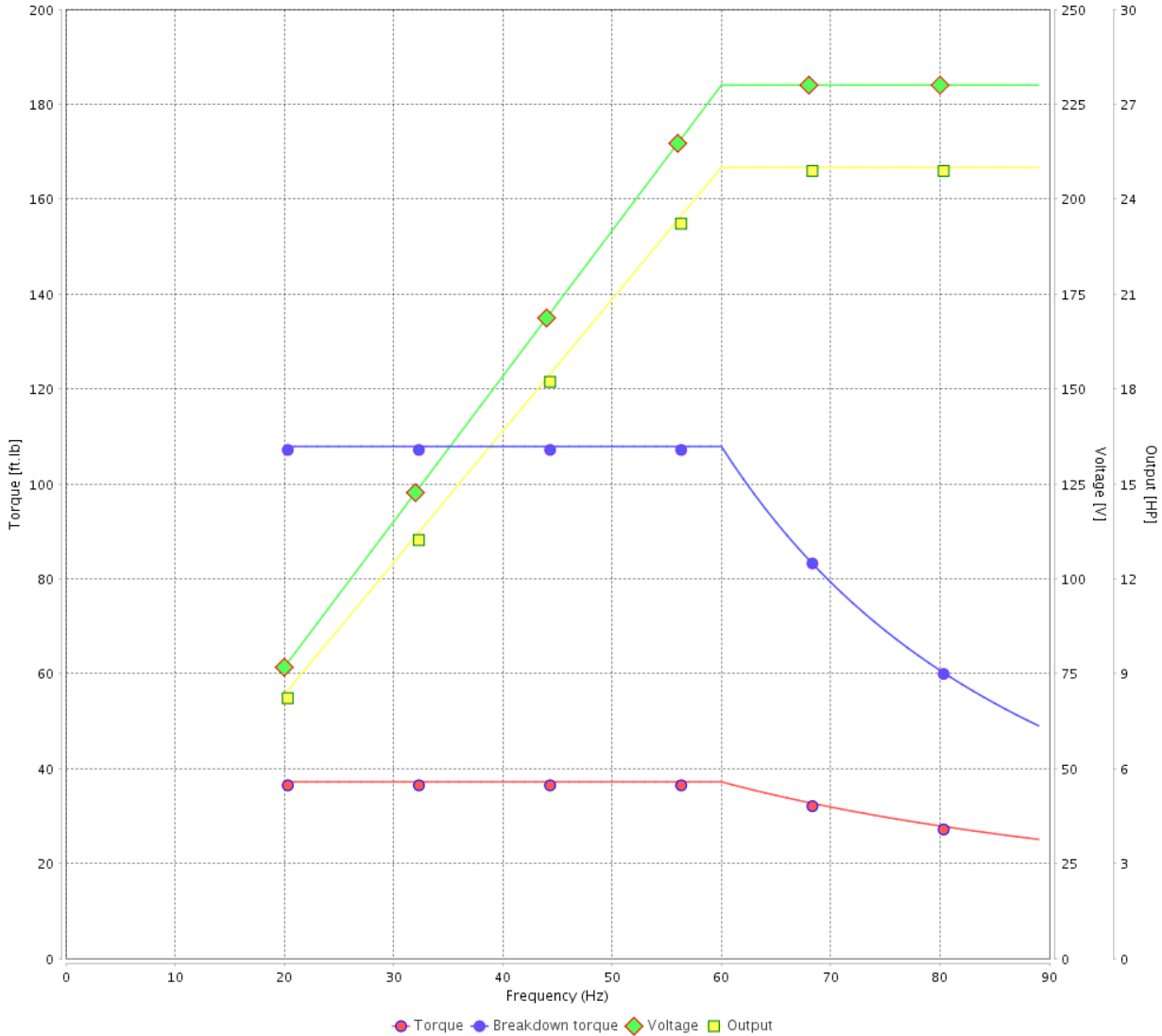
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Product code : 12707653

Catalog # : 02536OT3E256TC-S

VFD OPERATION CURVE

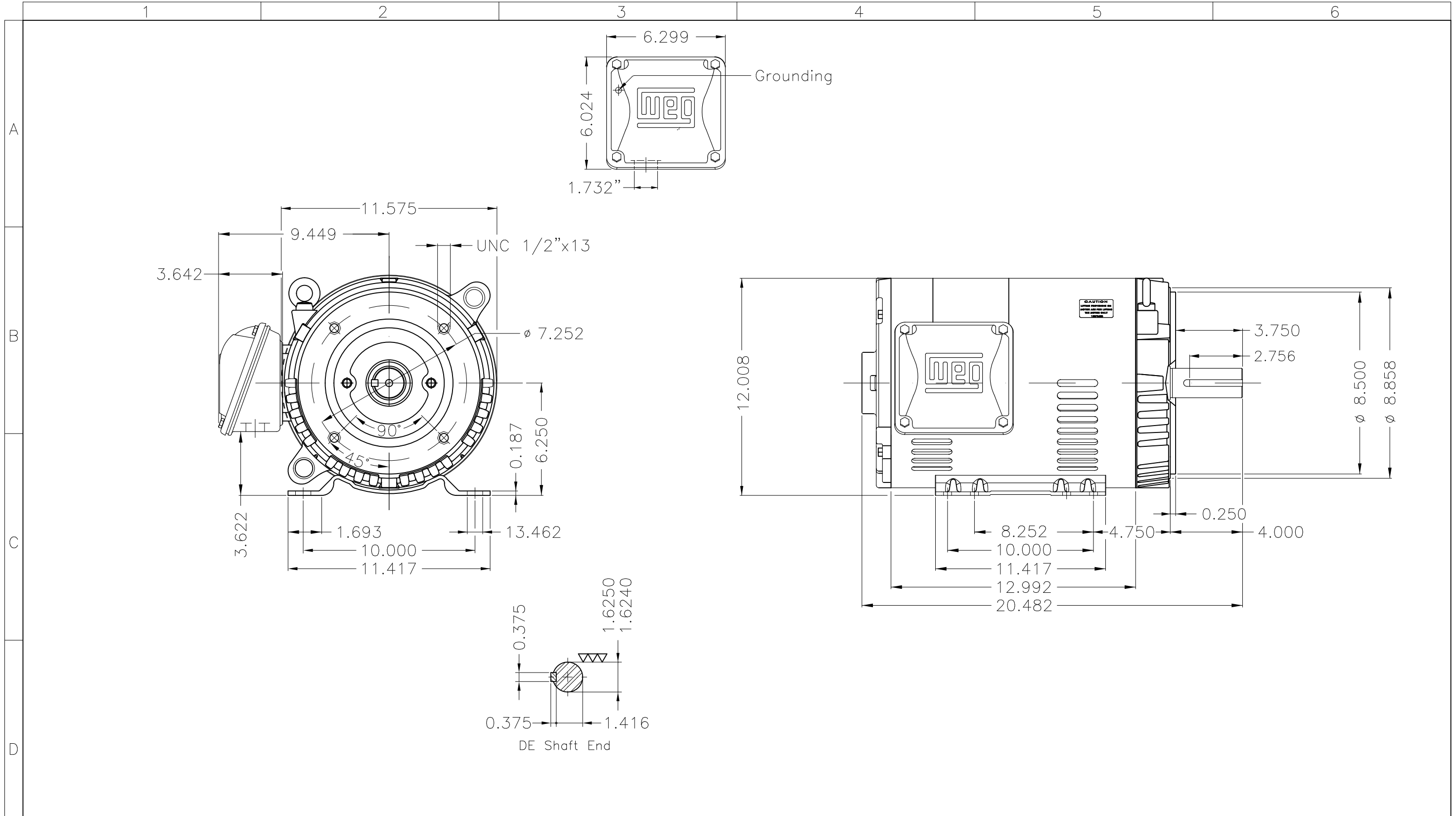



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 LRC : 6.3
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 Design : B

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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	PIRWBUSER	THREE PH. MOTOR ROLLED STEEL PREM. EFF.				PREVIEW	WDD	SHEET	1 / 1	
CHECKED		FRAME 254/6TC IP21 ODP								
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering						

25 HP 02 Poles 60 Hz

A

Dimensions in inches XME A3

**NEMA
Premium**

3PT9



Energy Verified

MADE IN MEXICO

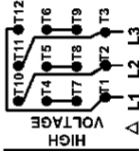
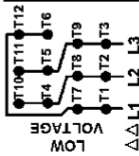
MAT: 12707653 CC029A**W01.T00IC0X0N****MODEL 02536OT3E256TC-S****23AUG2021 S/N:**

PH 3	Hz 60	HP 25
FR 254/6TC		KW 18.5
DUTY CONT.		V 230/460
ALT 1000 m.a.s.l.		A 58.2/29.1
INS CL F AT 80K		SFA 66.9/33.5
AMB 40°C	DES B	SF 1.15
ENCL ODP	CODE G	PF 0.87
USABLE @ 208V 64.4A		RPM 3530
SF1.00		NEMA NOM. EFF 91.7%

ALTERNATE RATING: 25HP 50Hz 190-220/380-415V SF1.15
70.6-62.3/35.3-33.0A 2905RPM EFF 88.5% IEC 60034-1

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

