DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W40 JM Pump NEMA Premium Efficiency Three-Phase

Product code : 14484577

Catalog # : 02536OT3E256JM-W40

Frame	: 254/6JM	Cooling method	: IC01 - ODP
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight³	: 243 lb
Protection degree	: IP23	Moment of inertia (J)	: 1.13 sq.ft.lb
Design	: B		

Output [HP]		25	20	20	20
Poles		2	2	2	2
Frequency [Hz]		60	50	50	50
Rated voltage [V]		230/460	380	400	415
Rated current [A]		57.6/28.8	28.2	27.4	27.0
L. R. Amperes [A]		374/187	192	186	200
LRC [A]		6.5x(Code G)	6.8x(Code H)	6.8x(Code H)	7.4x(Code J)
No load current [A]		17.0/8.50	8.20	9.10	10.0
Rated speed [RPM]		3535	2935	2945	2950
Slip [%]		1.81	2.17	1.83	1.67
Rated torque [ft.lb]		37.1	35.8	35.7	35.6
Locked rotor torque [%]		200	200	220	229
Breakdown torque [%]		280	260	300	320
Service factor		1.25	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K
Locked rotor time		19s (cold) 11s (hot)	14s (cold) 8s (hot)	18s (cold) 10s (hot)	14s (cold) 8s (hot)
Noise level²					
Efficiency (%)	25%	90.8	87.6	87.9	87.9
	50%	91.0	89.5	89.6	89.6
	75%	91.7	89.9	90.1	90.1
	100%	91.7	91.9	91.9	91.9
Power Factor	25%	0.53	0.54	0.49	0.45
	50%	0.77	0.77	0.73	0.69
	75%	0.85	0.85	0.82	0.79
	100%	0.88	0.88	0.86	0.84

		Drive end	Non drive end
Bearing type	:	6309 Z C3	6209 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 g
Lubricant type	:	Mobil Polyrex EM	

Foundation loads
Max. traction
Max. compression

Notes
USABLE @208V 63.7A SF 1.15 SFA 73.2A

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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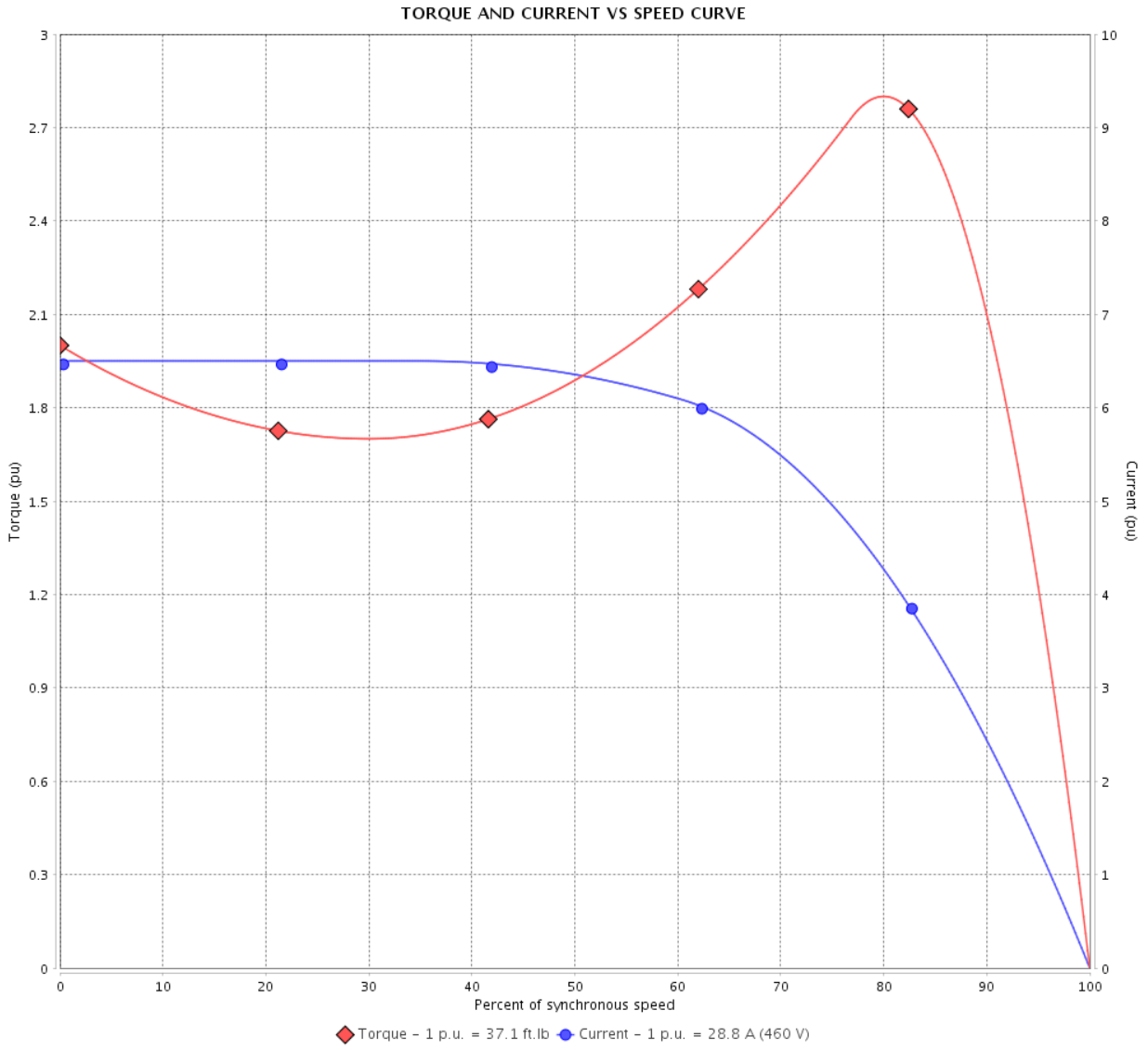
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	:

Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase	Product code :	14484577
		Catalog # :	02536OT3E256JM-W40



Performance	: 230/460 V 60 Hz 2P

Rated current	: 57.6/28.8 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

Locked rotor time	: 19s (cold) 11s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

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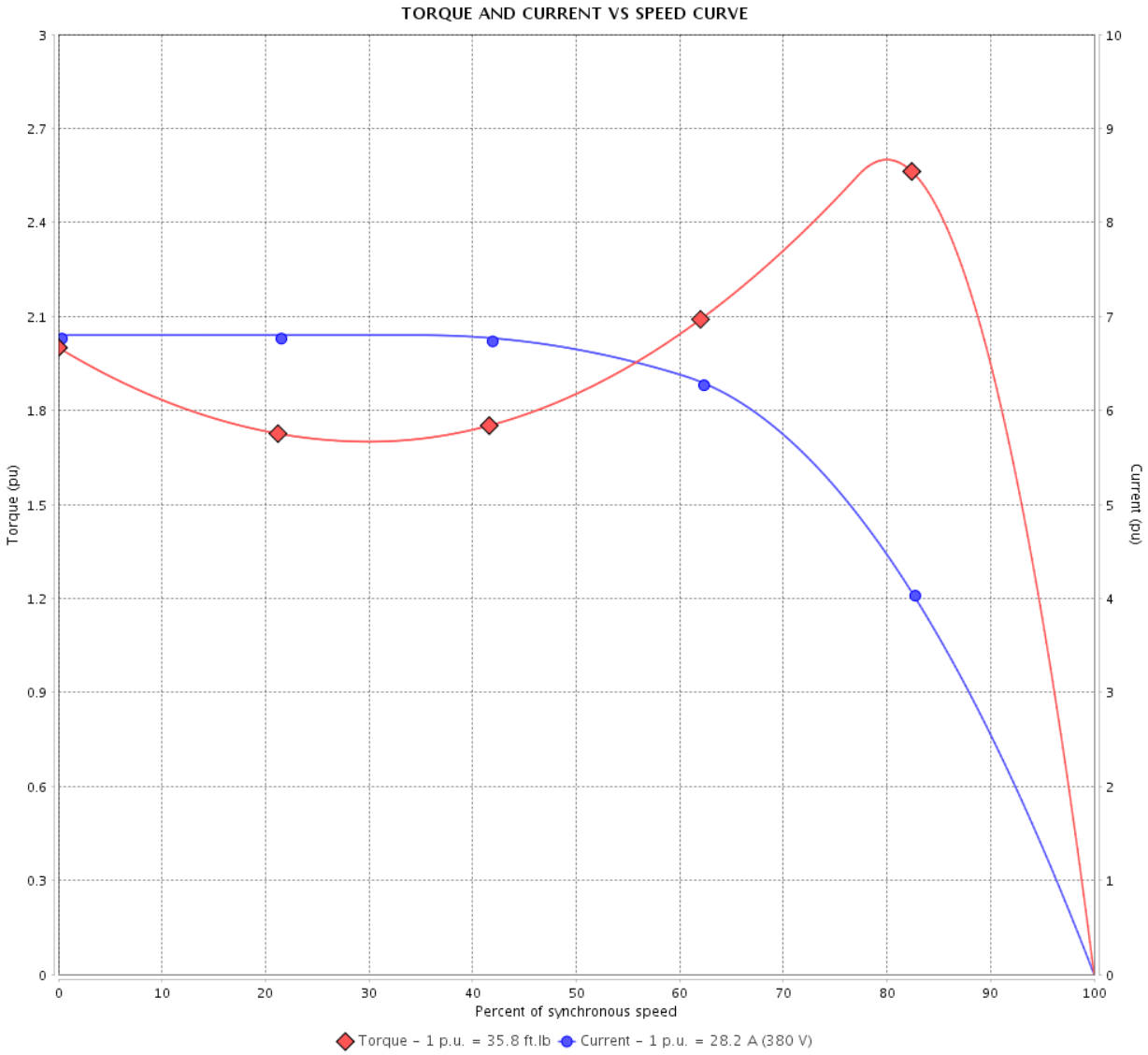

Performance	: 380 V 50 Hz 2P IE3

Rated current	: 28.2 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B

Locked rotor time	: 14s (cold) 8s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

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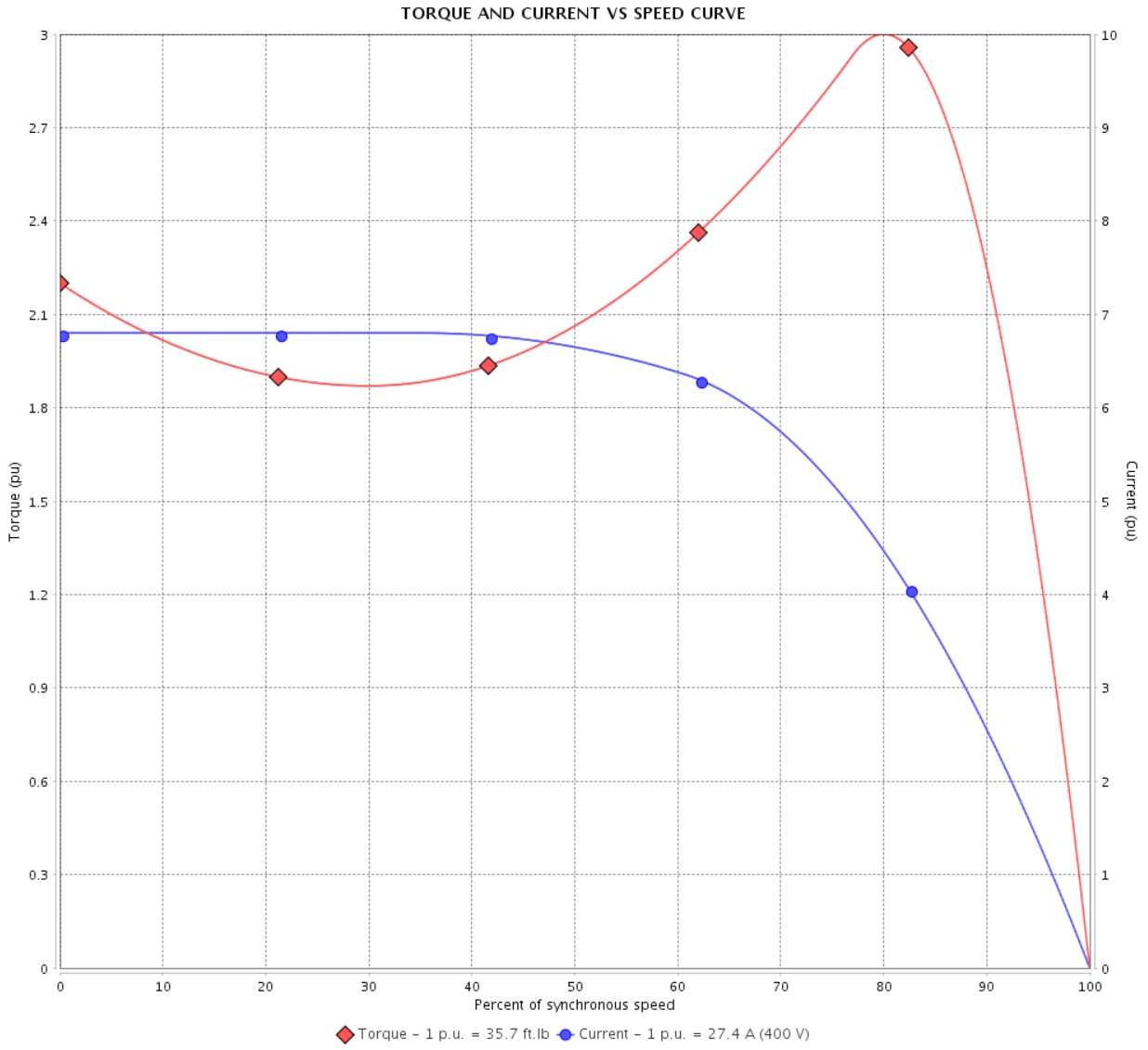

Performance	: 400 V 50 Hz 2P IE3

Rated current	: 27.4 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

Locked rotor time	: 18s (cold) 10s (hot)

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TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

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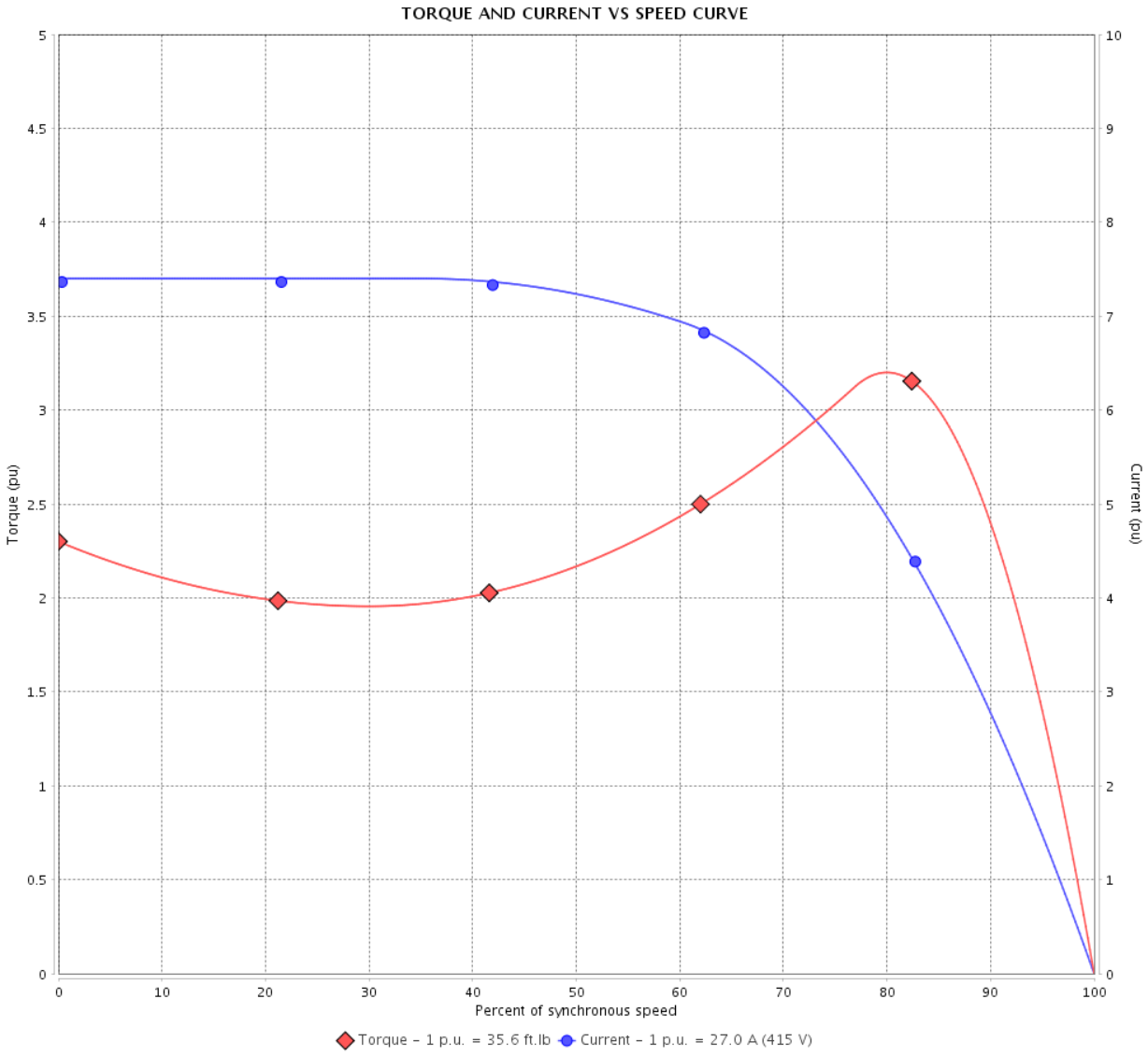

Performance	: 415 V 50 Hz 2P IE3

Rated current	: 27.0 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

Locked rotor time	: 14s (cold) 8s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

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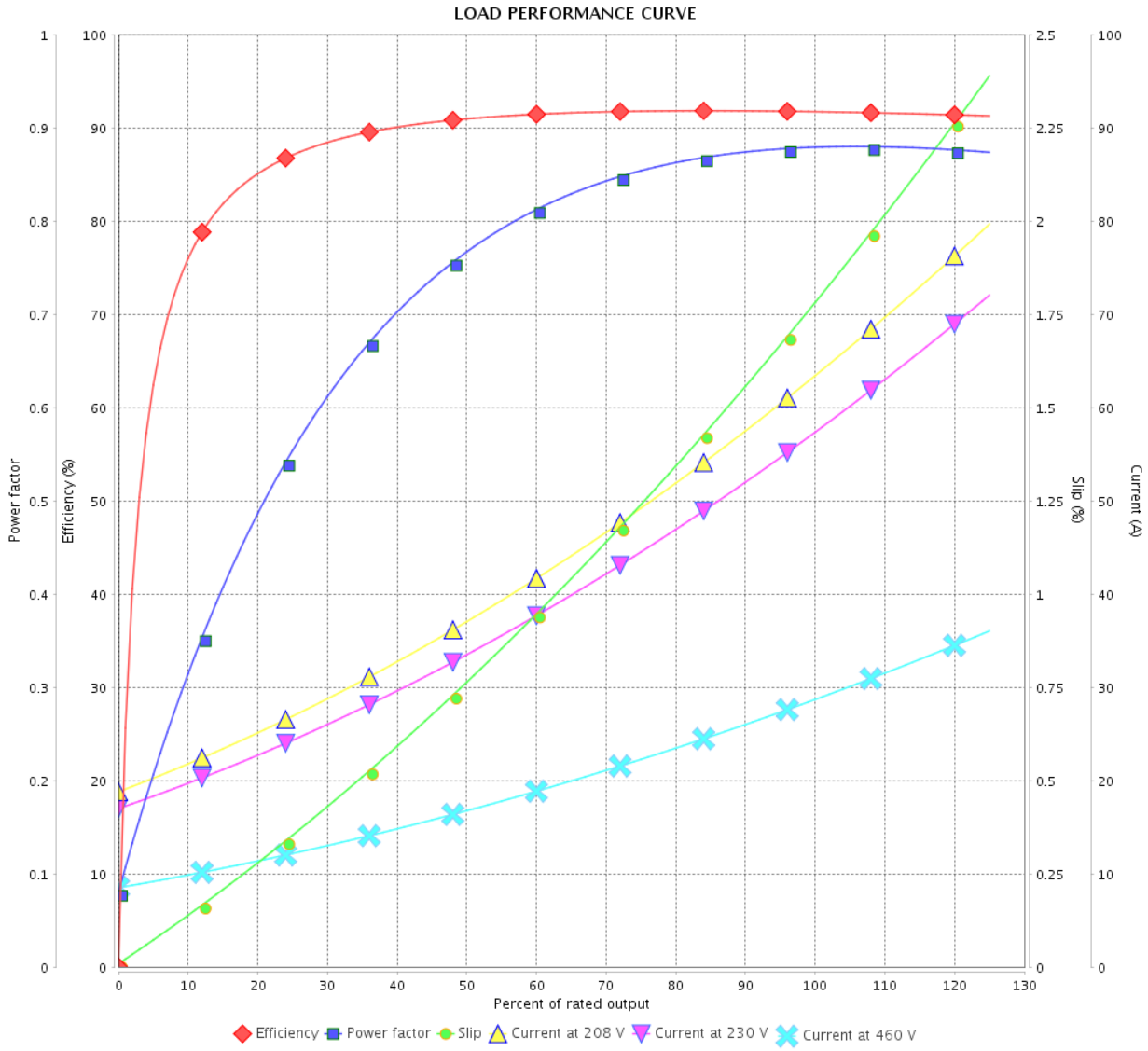

Performance	: 230/460 V 60 Hz 2P

Rated current	: 57.6/28.8 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

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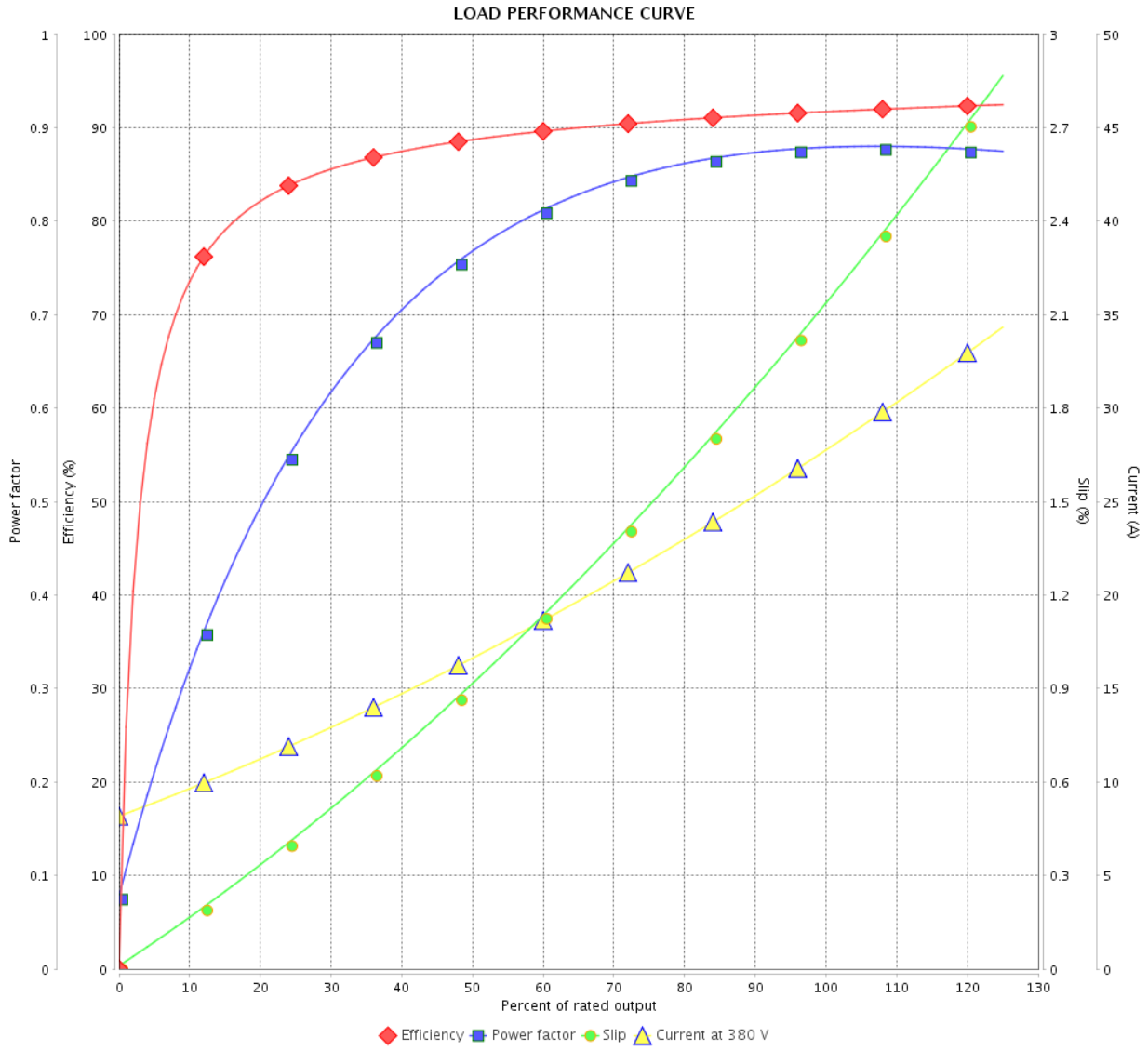

Performance	: 380 V 50 Hz 2P IE3

Rated current	: 28.2 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B

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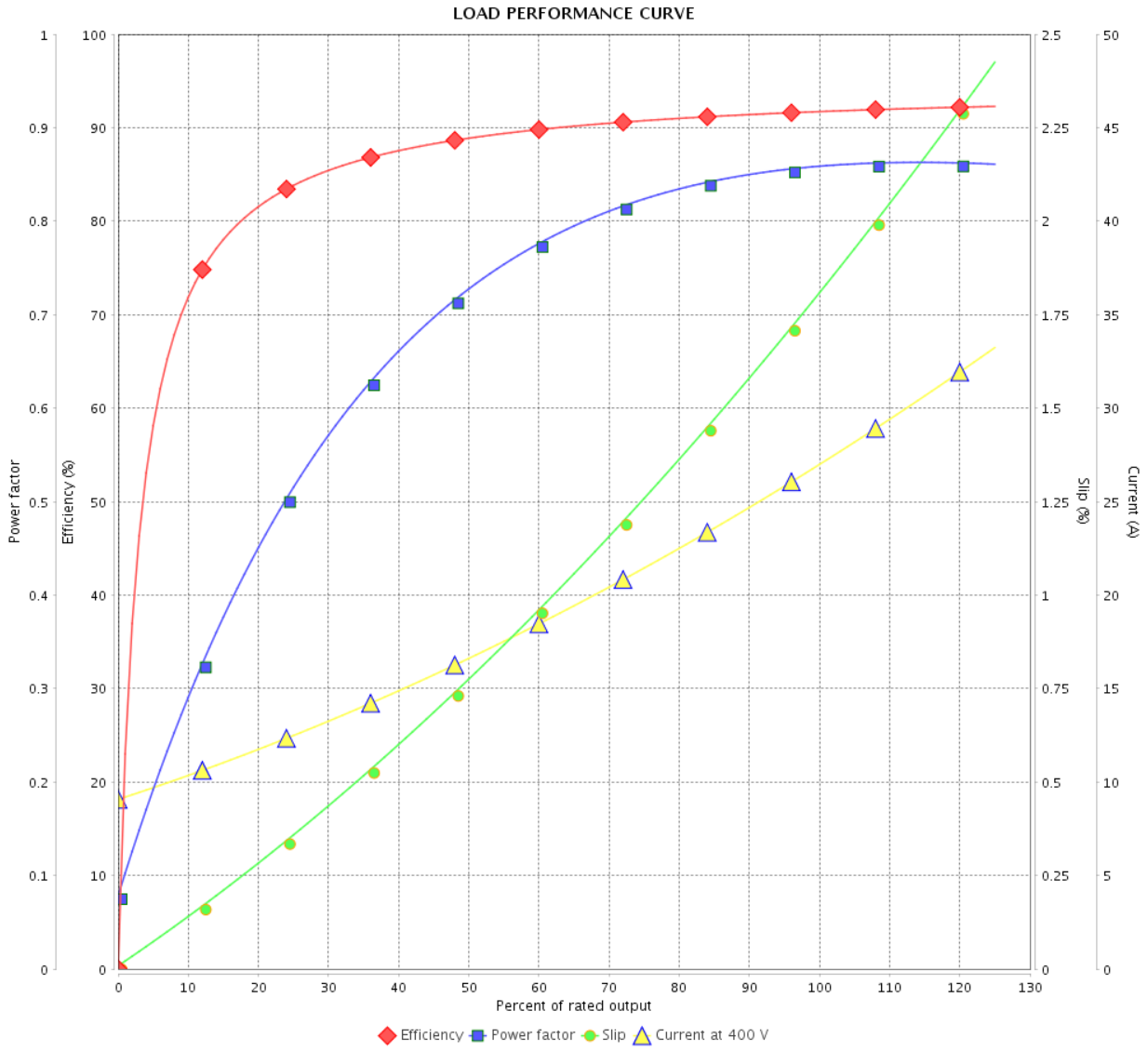

Performance	: 400 V 50 Hz 2P IE3

Rated current	: 27.4 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

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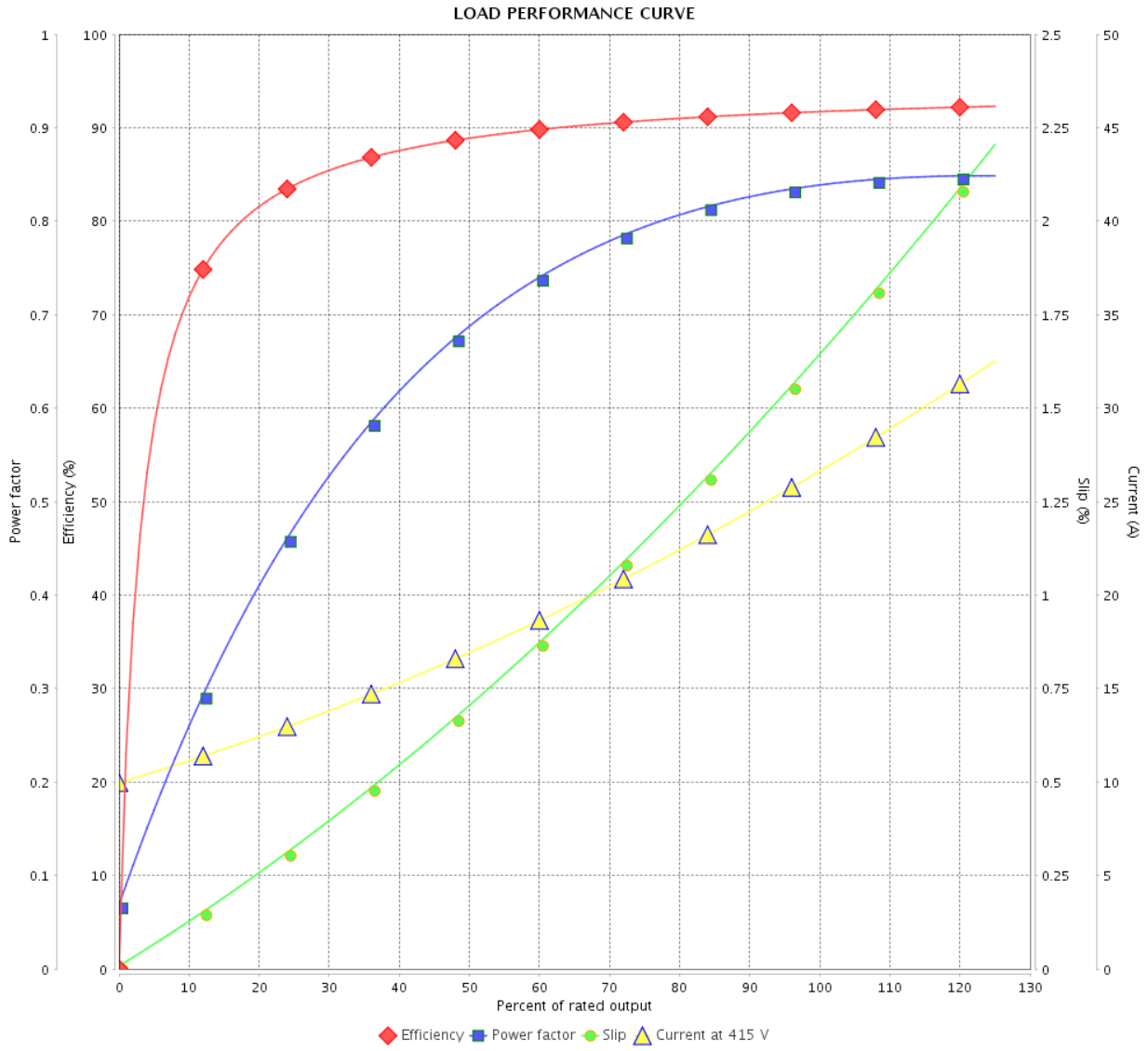

Performance	: 415 V 50 Hz 2P IE3		
Rated current	: 27.0 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	:		
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase	Product code :	14484577
		Catalog # :	02536OT3E256JM-W40

Performance	: 230/460 V 60 Hz 2P		
Rated current	: 57.6/28.8 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B
Heating constant			
Cooling constant			

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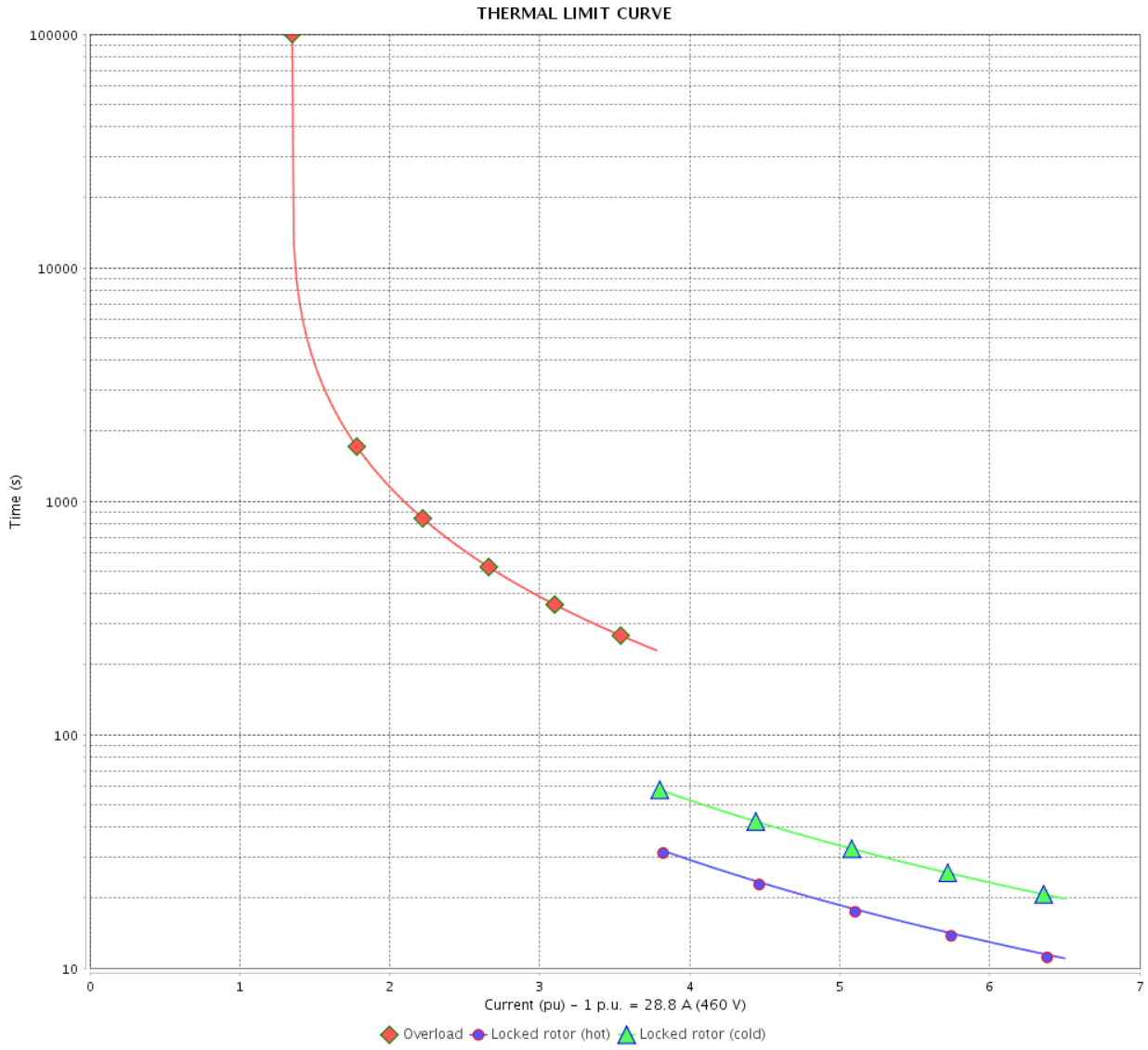
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer :



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THERMAL LIMIT CURVE

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Customer	:		
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase	Product code :	14484577
		Catalog # :	02536OT3E256JM-W40

Performance	: 380 V 50 Hz 2P IE3		
Rated current	: 28.2 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B
Heating constant			
Cooling constant			

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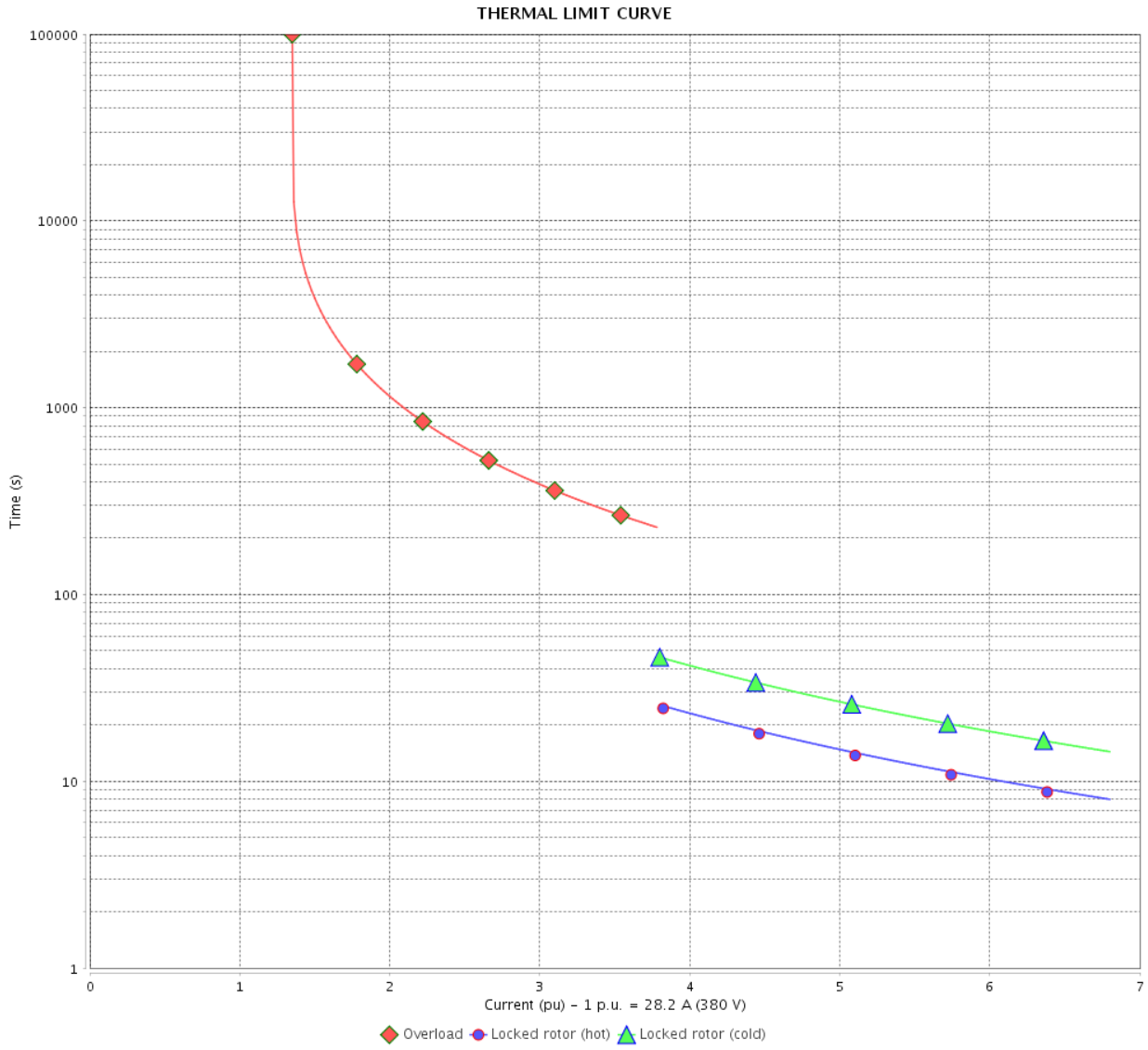
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer :



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THERMAL LIMIT CURVE

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Customer	:		
Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase	Product code :	14484577
		Catalog # :	02536OT3E256JM-W40

Performance	: 400 V 50 Hz 2P IE3		
Rated current	: 27.4 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B
Heating constant			
Cooling constant			

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THERMAL LIMIT CURVE

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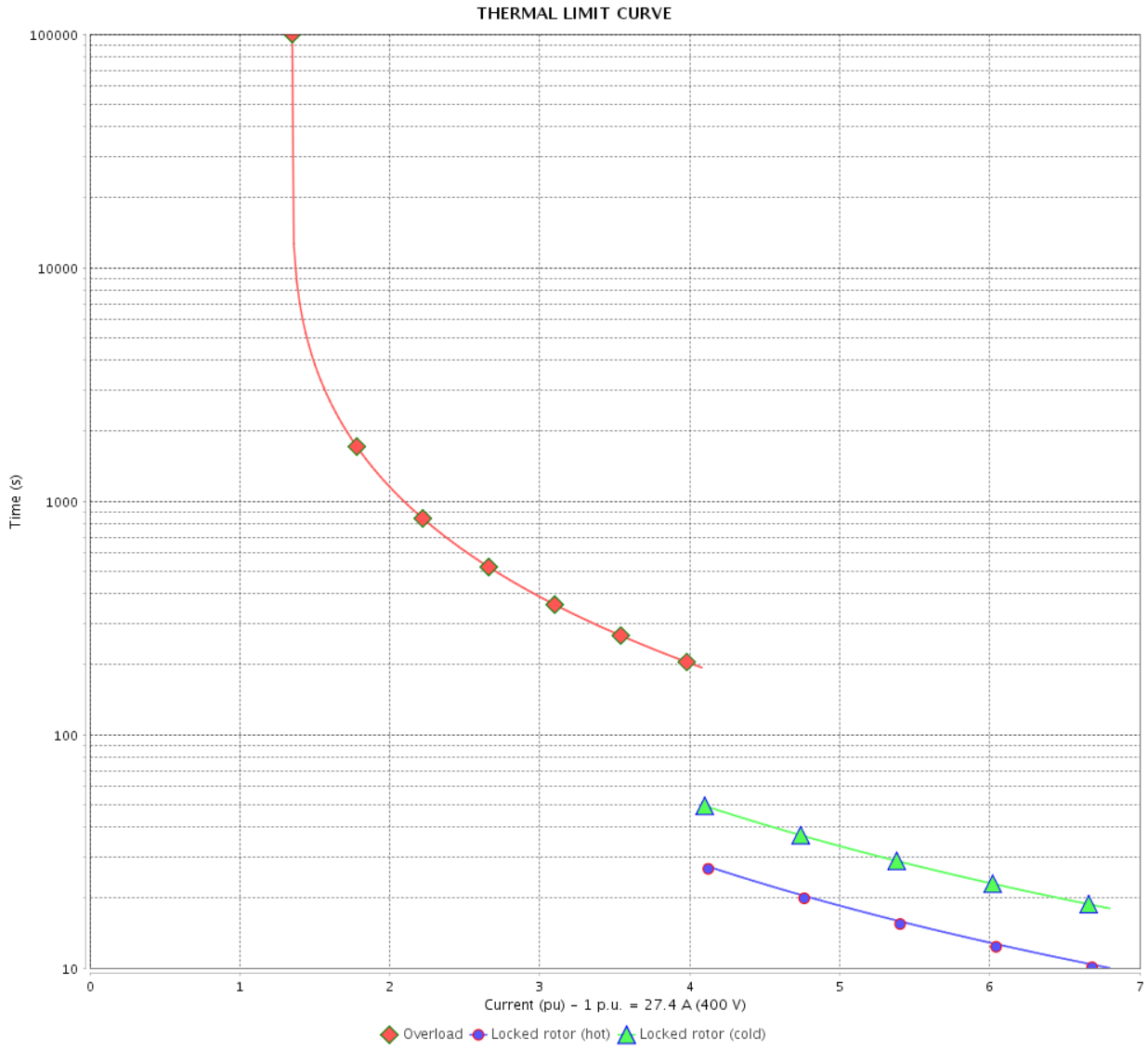

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Product line	: W40 JM Pump NEMA Premium Efficiency Three-Phase	Product code :	14484577
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Performance	: 415 V 50 Hz 2P IE3		
Rated current	: 27.0 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B
Heating constant			
Cooling constant			

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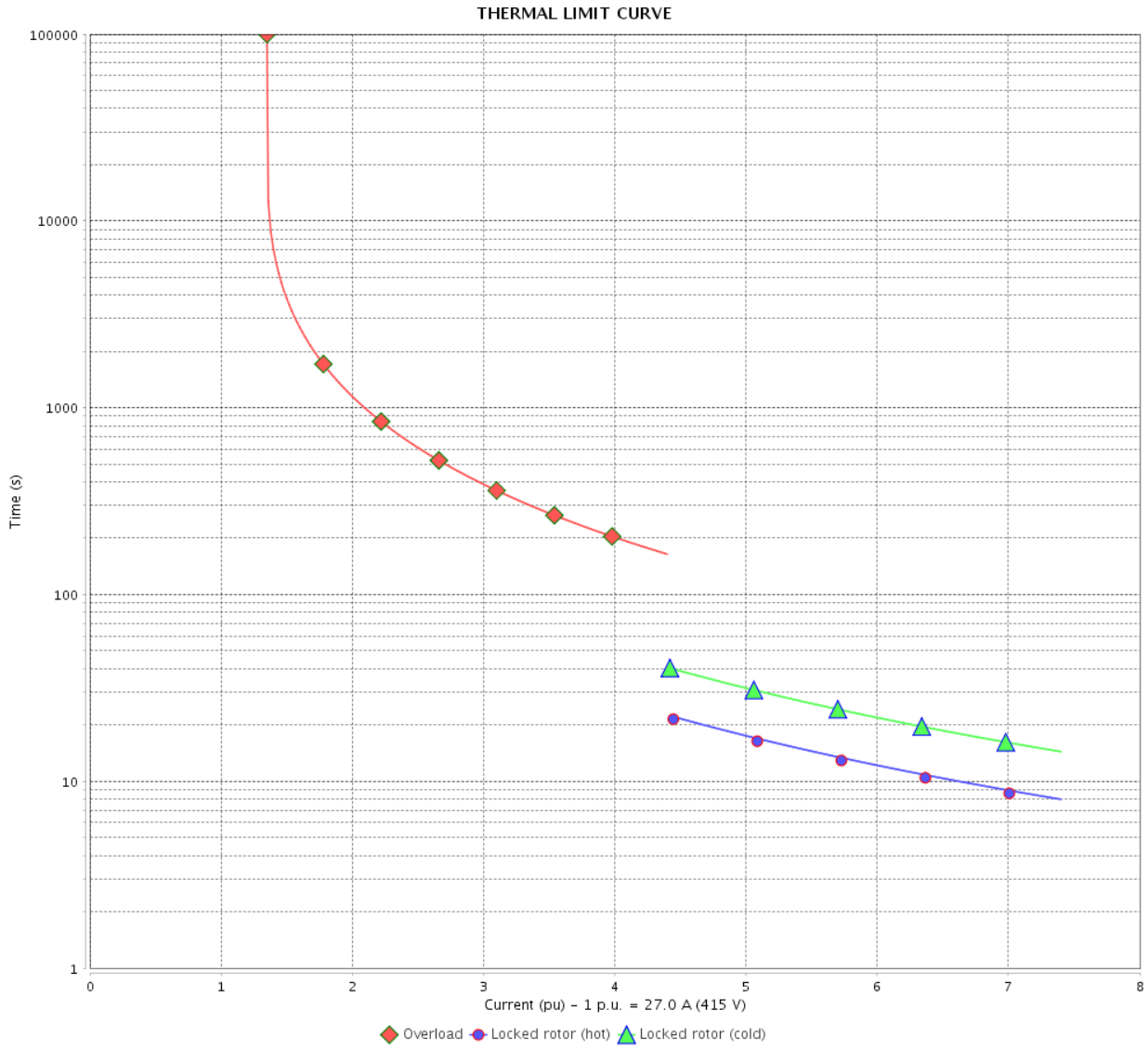
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage

Customer :



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

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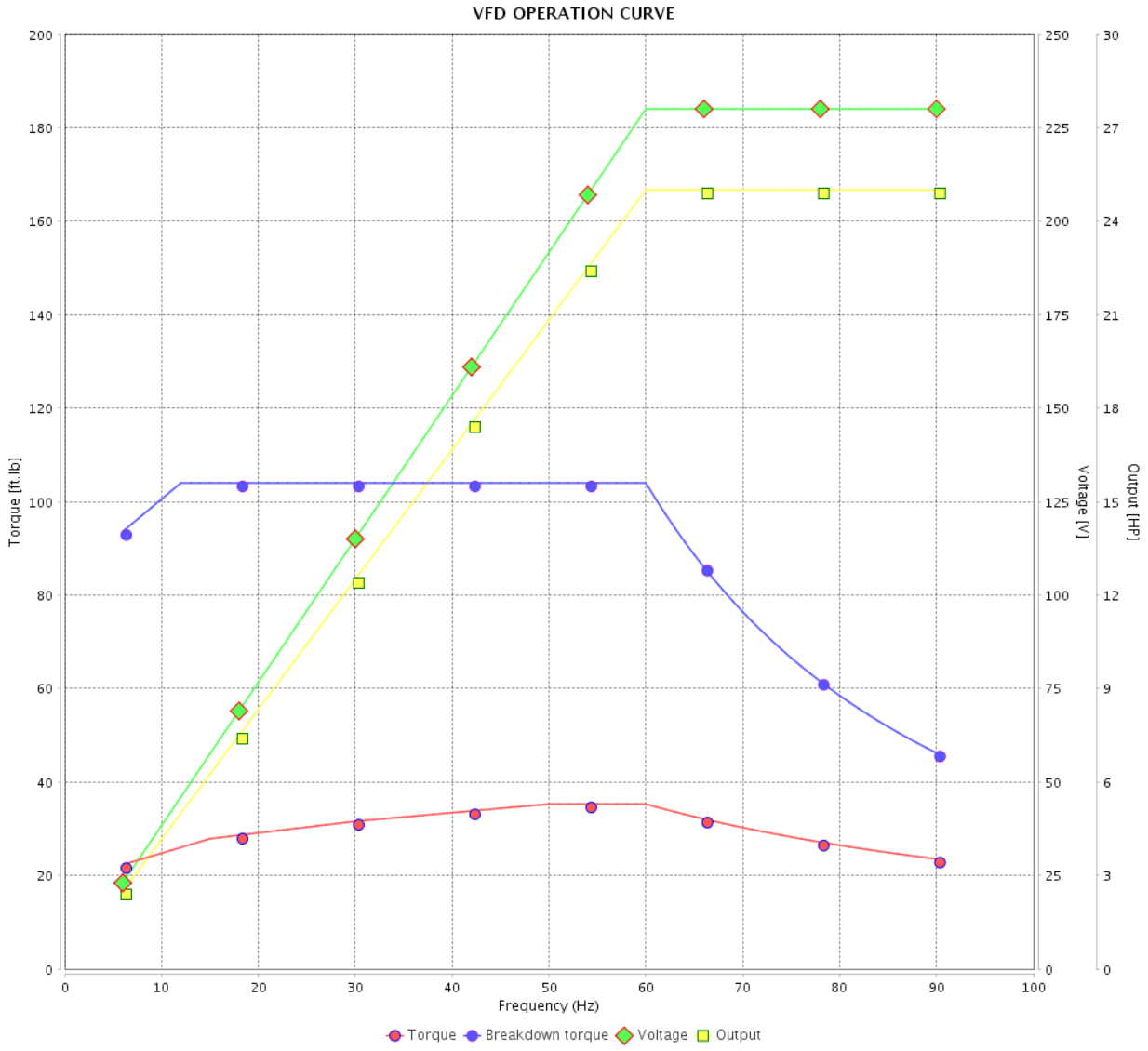

Performance	: 230/460 V 60 Hz 2P		
Rated current	: 57.6/28.8 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.5	Duty cycle	: Cont.(S1)
Rated torque	: 37.1 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

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VFD OPERATION CURVE

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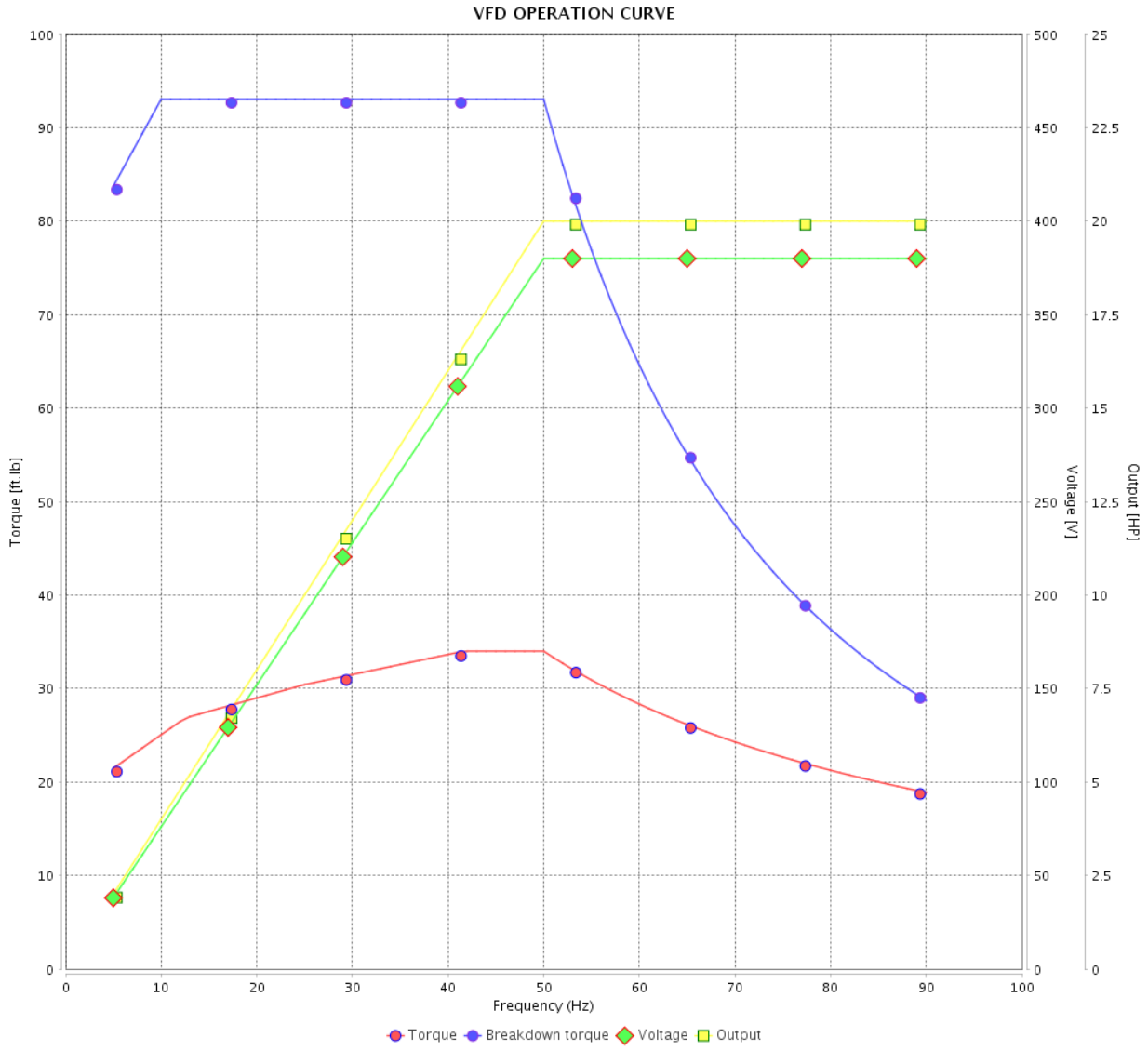

Performance	: 380 V 50 Hz 2P IE3		
Rated current	: 28.2 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.8 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2935 rpm	Design	: B

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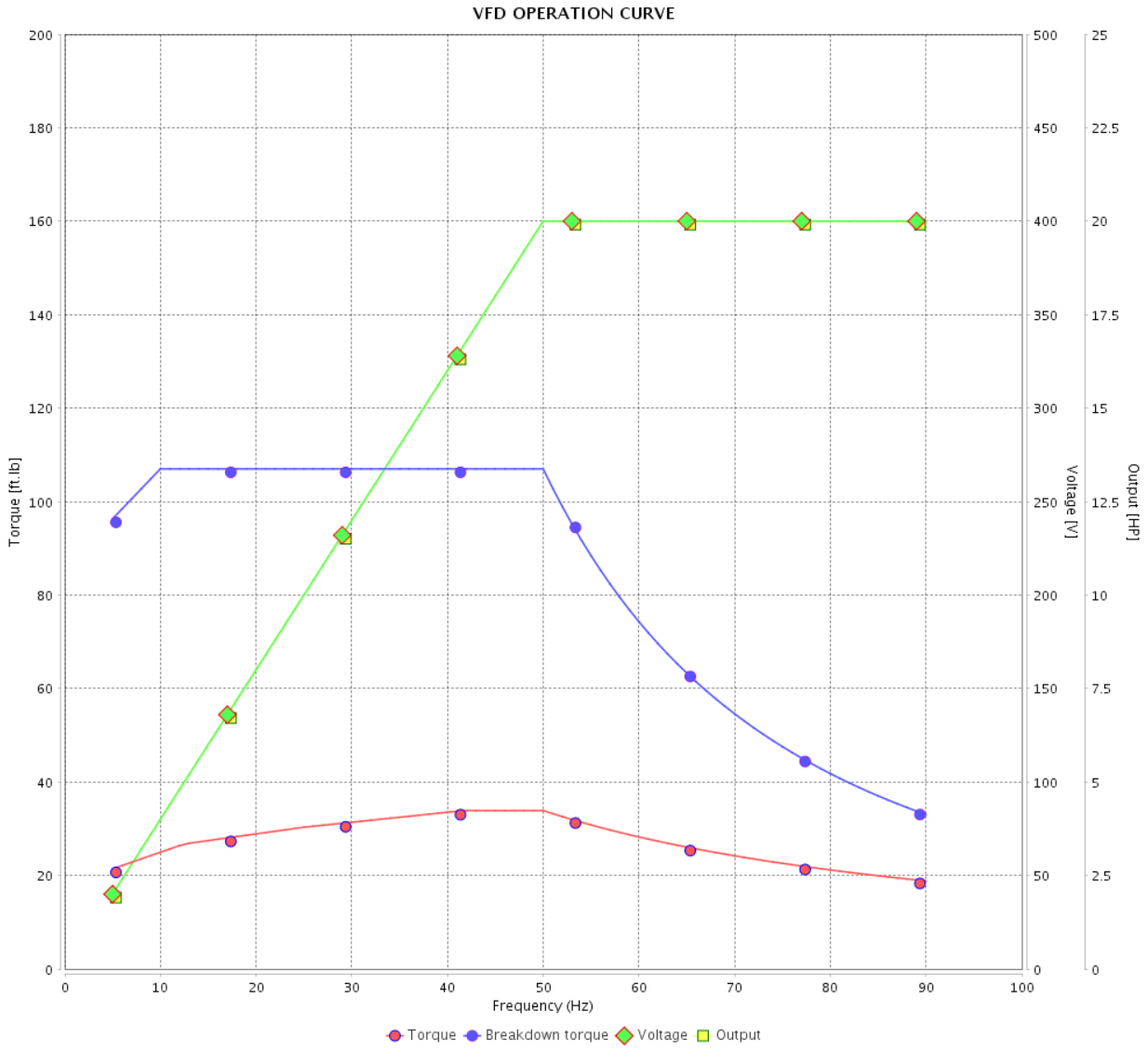

Performance	: 400 V 50 Hz 2P IE3		
Rated current	: 27.4 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 35.7 ft.lb	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

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VFD OPERATION CURVE

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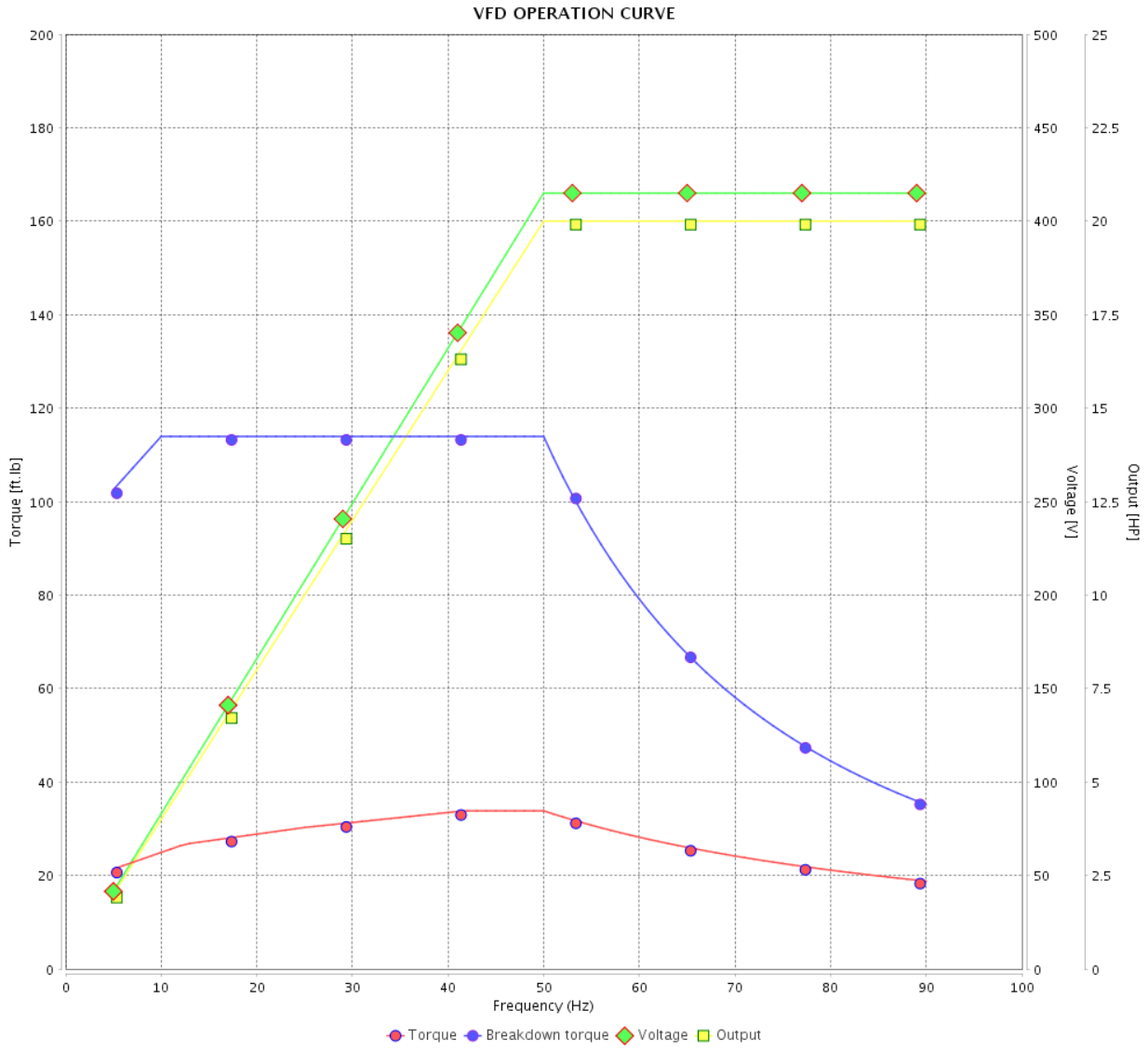

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Rated current	: 27.0 A	Moment of inertia (J)	: 1.13 sq.ft.lb
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 35.6 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

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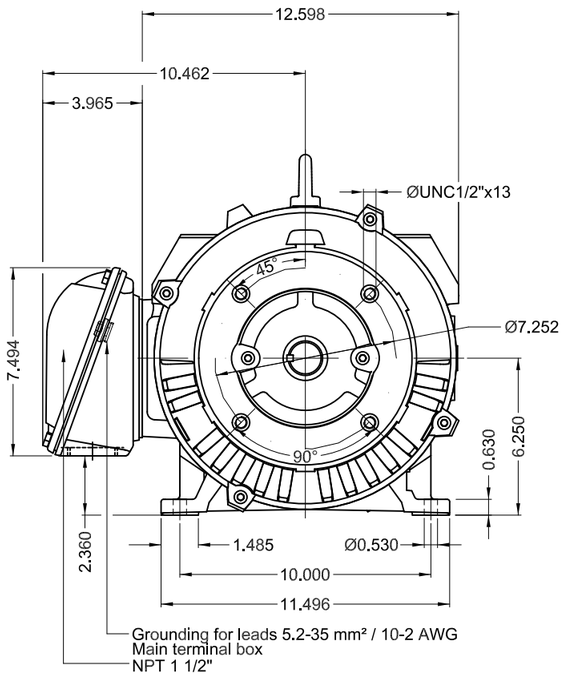
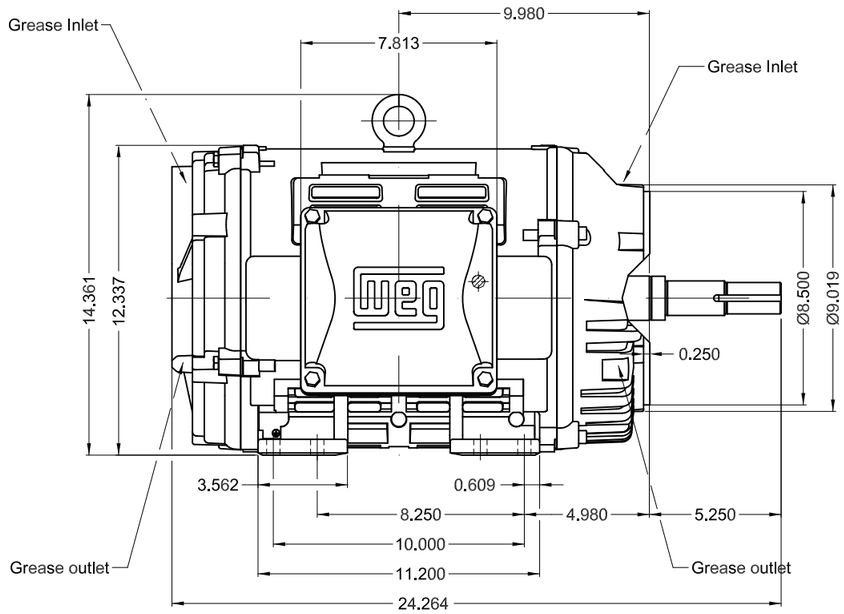
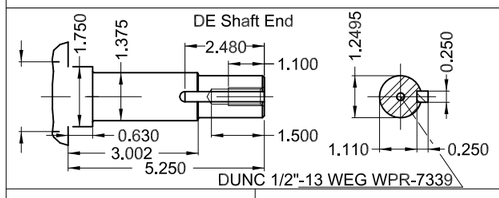






Color RAL 5009

Painting plan 203A

Mounting NEMA F-1

Mounting B34R(D)

25 HP 02 Poles 60 Hz | A

1:6

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER

EXECUTED	PIRWBUSER	THREE PH. MOTOR W40 CLOSE COUPLED PUMP JM TYPE PREM. EFF.	PREVIEW
CHECKED		FRAME 254/6JM IP23 ODP	WDD
RELEASED			
REL DT.		WMO Jaragua do Sul Product Engineering	SHEET 1 / 1

Dimensions in inches

XME A3

W40 NEMA Premium®

CC029A

Inverter Duty Motor

3PT9 LISTED

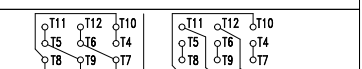
IEC 60034-1

MOD.TO1#FOXON

For 60Hz use on PWM, VT 1000:1, CT 3:1, 1.0SF

MODEL 02536OT3E256JM-W40
MADE IN BRAZIL
14484577

PH 3	FR 254/6JM		HP(kW) 25.0(18.5)			Hz 60	
V 230/460		A 57.6/28.8			RPM 3535	DES B	
NEMA NOM EFF	91.7	%	INS. CL. F	ΔT 80 K		IP23	
ENCL ODP	DUTY	CONT.		AMB. 40°C			
CODE G	PF 0.88	SF 1.25	SFA 72.0/36.0				
USABLE @208V	63.7 A	SF 1.15	SFA 73.3				
20HP 15kW 50Hz 380V 28.2A 2935RPM SF1.00 EFF 91.9% (IE3)							



6309-Z-C3

6209-Z-C3

MOBIL POLYREX EM
13 g 20000 h

ALT	1000	m.a.s.l.	254 Lbs