

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JP Pump High Efficiency
Three-Phase

Product code : 14829216

Catalog # : 04036OP3HFP286JPV-W4

Frame : 284/6JP
Output : 40 HP (30 kW)
Poles : 2
Frequency : 60 Hz
Rated voltage : 575 V
Rated current : 37.8 A
L. R. Amperes : 230 A
LRC : 6.1x(Code G)
No load current : 11.2 A
Rated speed : 3535 rpm
Slip : 1.81 %
Rated torque : 59.4 ft.lb
Locked rotor torque : 170 %
Breakdown torque : 250 %
Insulation class : F
Service factor : 1.15
Moment of inertia (J) : 1.91 sq.ft.lb
Design : B

Locked rotor time : 18s (cold) 10s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP23
Cooling method : IC01 - ODP
Mounting : W-6
Rotation¹ : Both (CW and CCW)
Starting method : Direct On Line
Approx. weight³ : 348 lb

Output	25%	50%	75%	100%
Efficiency (%)	90.8	91.0	91.7	91.7
Power Factor	0.54	0.78	0.86	0.87

Foundation loads
Max. traction
Max. compression

	Drive end	Non drive end
Bearing type :	6311 Z C3	6211 Z C3
Sealing :	Without Bearing Seal	Without Bearing Seal
Lubrication interval :	11517 h	14226 h
Lubricant amount :	18 g	11 g
Lubricant type :	Mobil Polyrex EM	

Notes

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.

Rev.	Changes Summary	Performed	Checked	Date
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Checked by				
Date	10/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



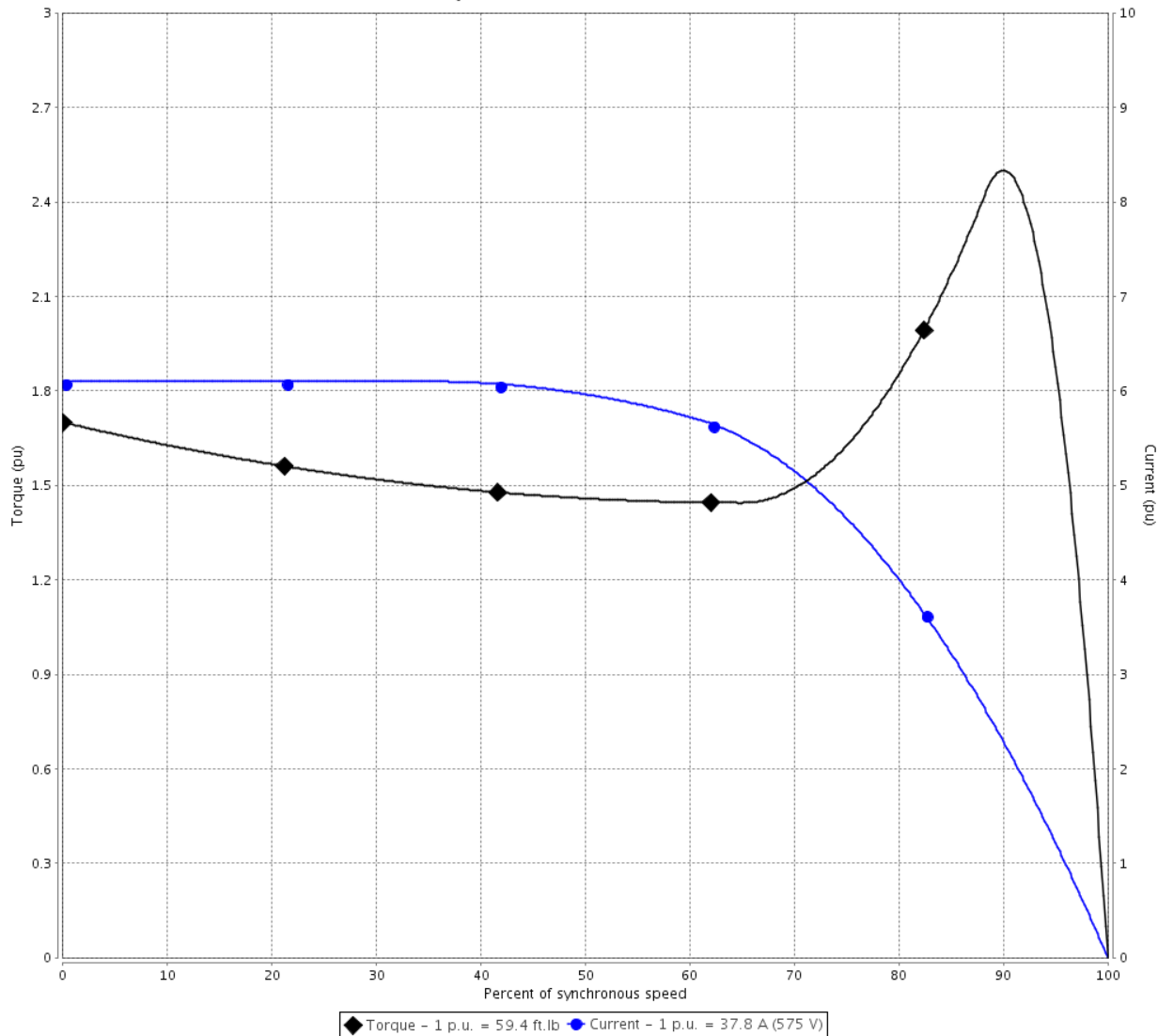
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W4

TORQUE AND CURRENT VS SPEED CURVE



Performance : 575 V 60 Hz 2P

Rated current	: 37.8 A	Moment of inertia (J)	: 1.91 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 59.4 ft.lb	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 3535 rpm	Design	: B

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

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		Revision		

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

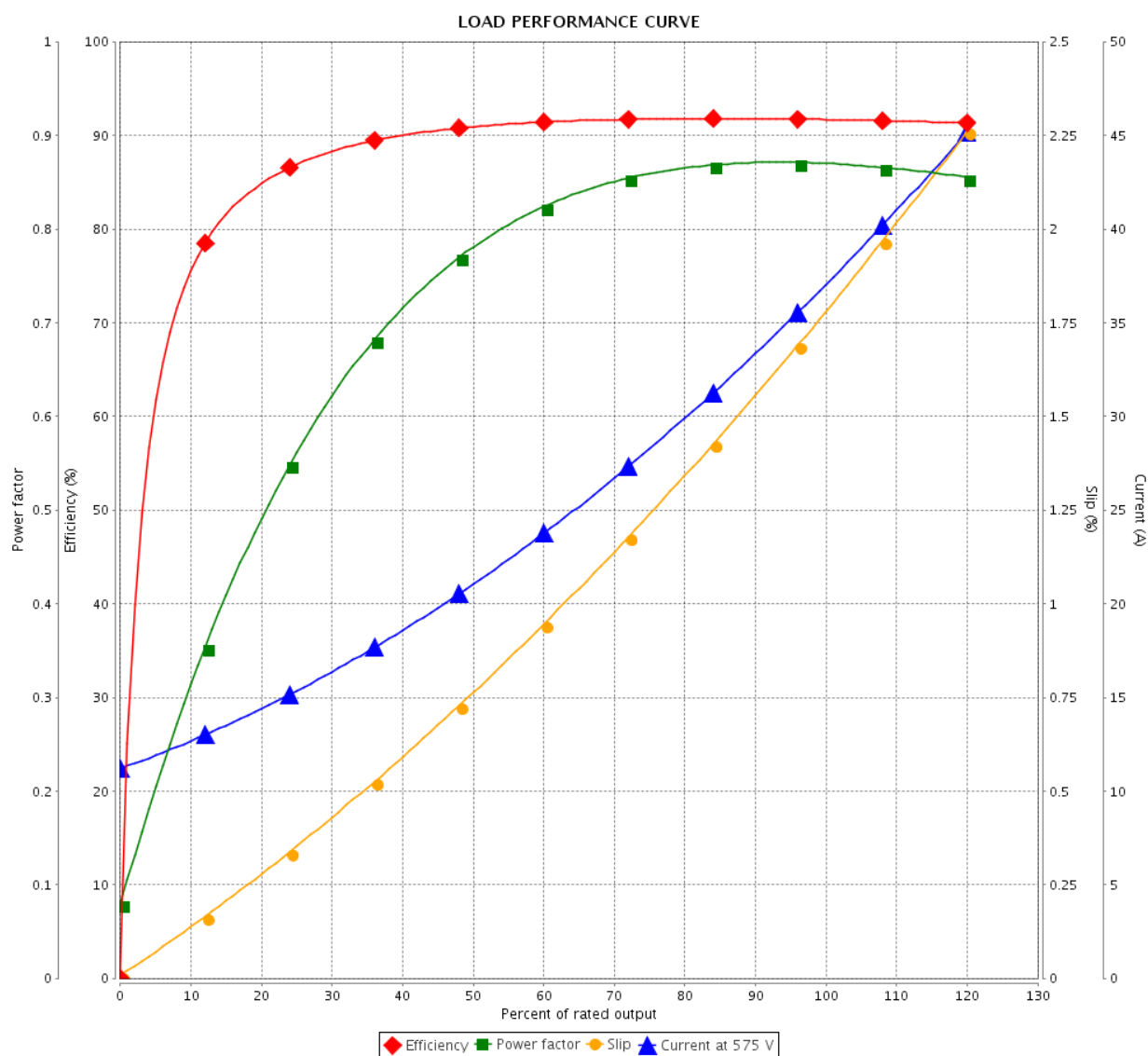


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THERMAL LIMIT CURVE

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: W40 JP Pump High Efficiency
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Catalog # :

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W4

Performance : 575 V 60 Hz 2P

Rated current

: 37.8 A

LRC

: 6.1

Rated torque

: 59.4 ft.lb

Locked rotor torque

: 170 %

Breakdown torque

: 250 %

Rated speed

: 3535 rpm

Moment of inertia (J)

: 1.91 sq.ft.lb

Duty cycle

: Cont.(S1)

Insulation class

: F

Service factor

: 1.15

Temperature rise

: 80 K

Design

: B

Heating constant

Cooling constant

Rev.

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Date

10/04/2020

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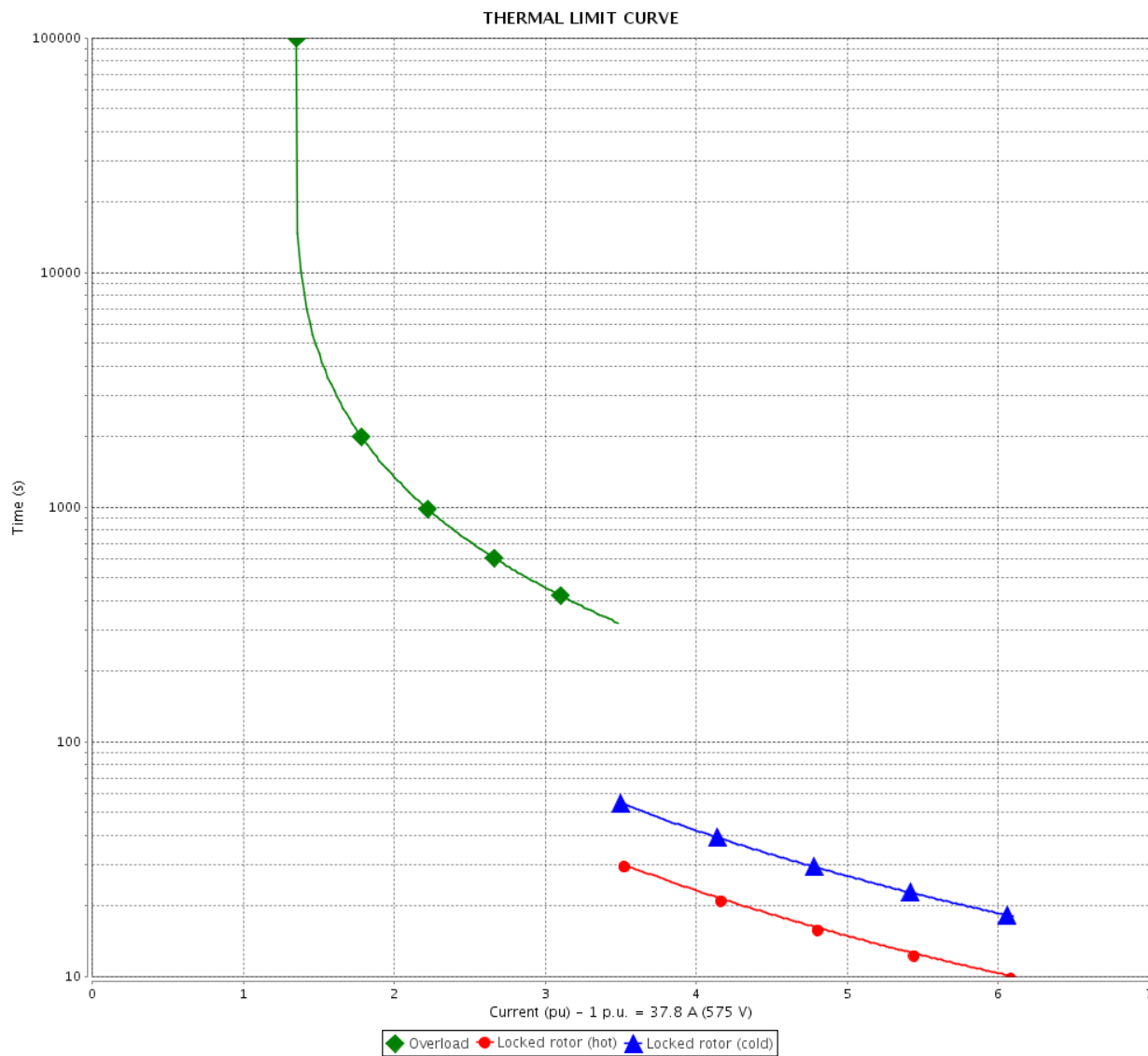
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

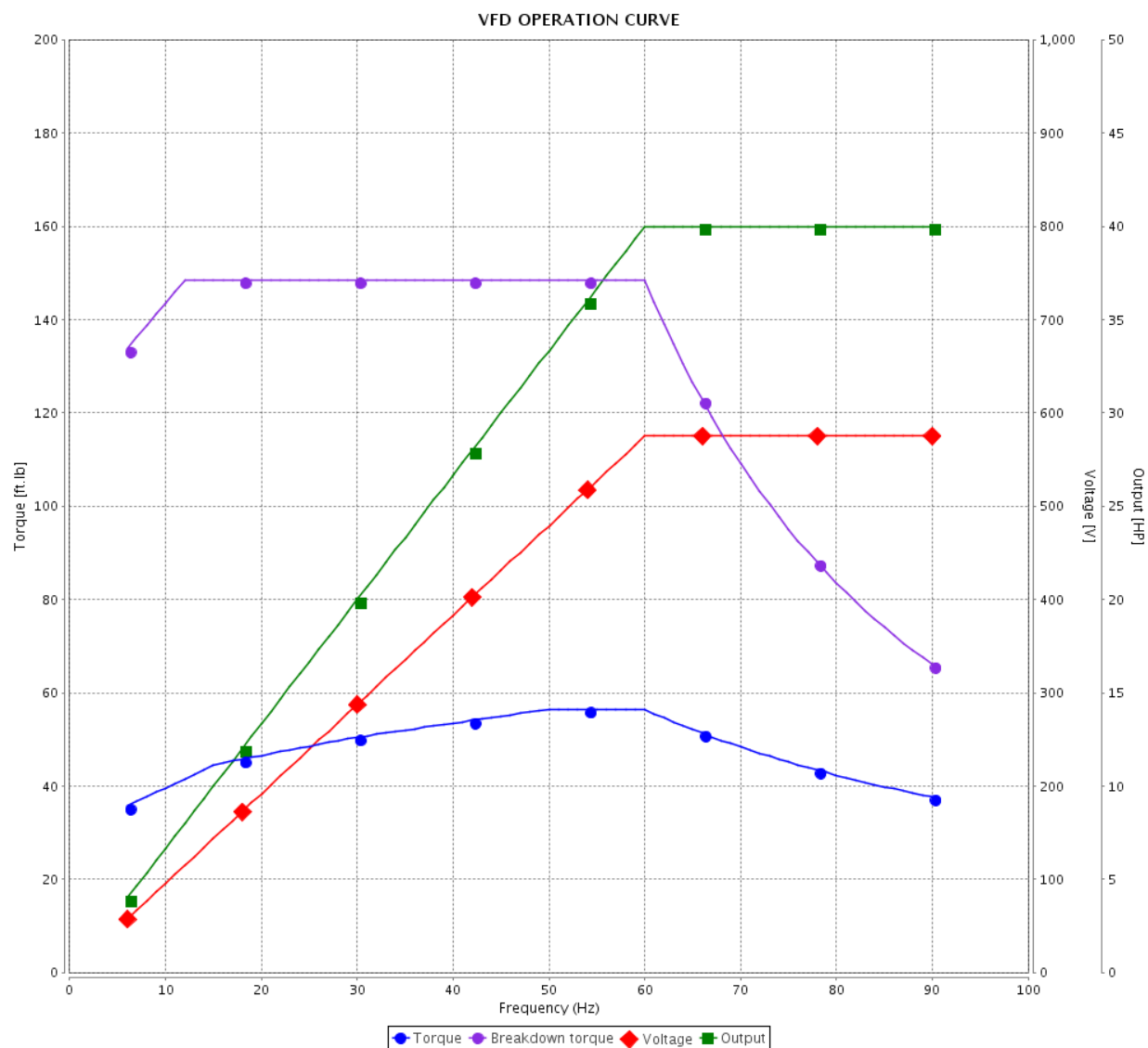


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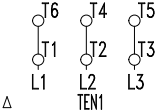

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W40

*Severe Duty*

PH	FR	HP(kW)		Hz				
V —		A —						
NEMA NOM EFF — %		RPM						
ENCL ODP	DUTY		INS. CL.	ΔT	K			
PF		DES —	CODE	AMB.				
SF	SFA		ALT 1000 m.a.s.l.					
					Lbs			