

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14491995
Catalog # : 04036OP3HFP286TSC-W4

Frame	: 284/6TSC	Locked rotor time	: 18s (cold) 10s (hot)
Output	: 40 HP (30 kW)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 37.8 A	Protection degree	: IP23
L. R. Amperes	: 230 A	Cooling method	: IC01 - ODP
LRC	: 6.1x(Code G)	Mounting	: F-1
No load current	: 11.2 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 3535 rpm	Starting method	: Direct On Line
Slip	: 1.81 %	Approx. weight ³	: 341 lb
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		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	90.8	91.0	91.7	91.7	Max. traction
Power Factor	0.54	0.78	0.86	0.87	Max. compression

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 Z C3	6211 Z C3
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	20000 h	20000 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
Performed by		Page Revision 1 / 6		
Checked by				
Date	10/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

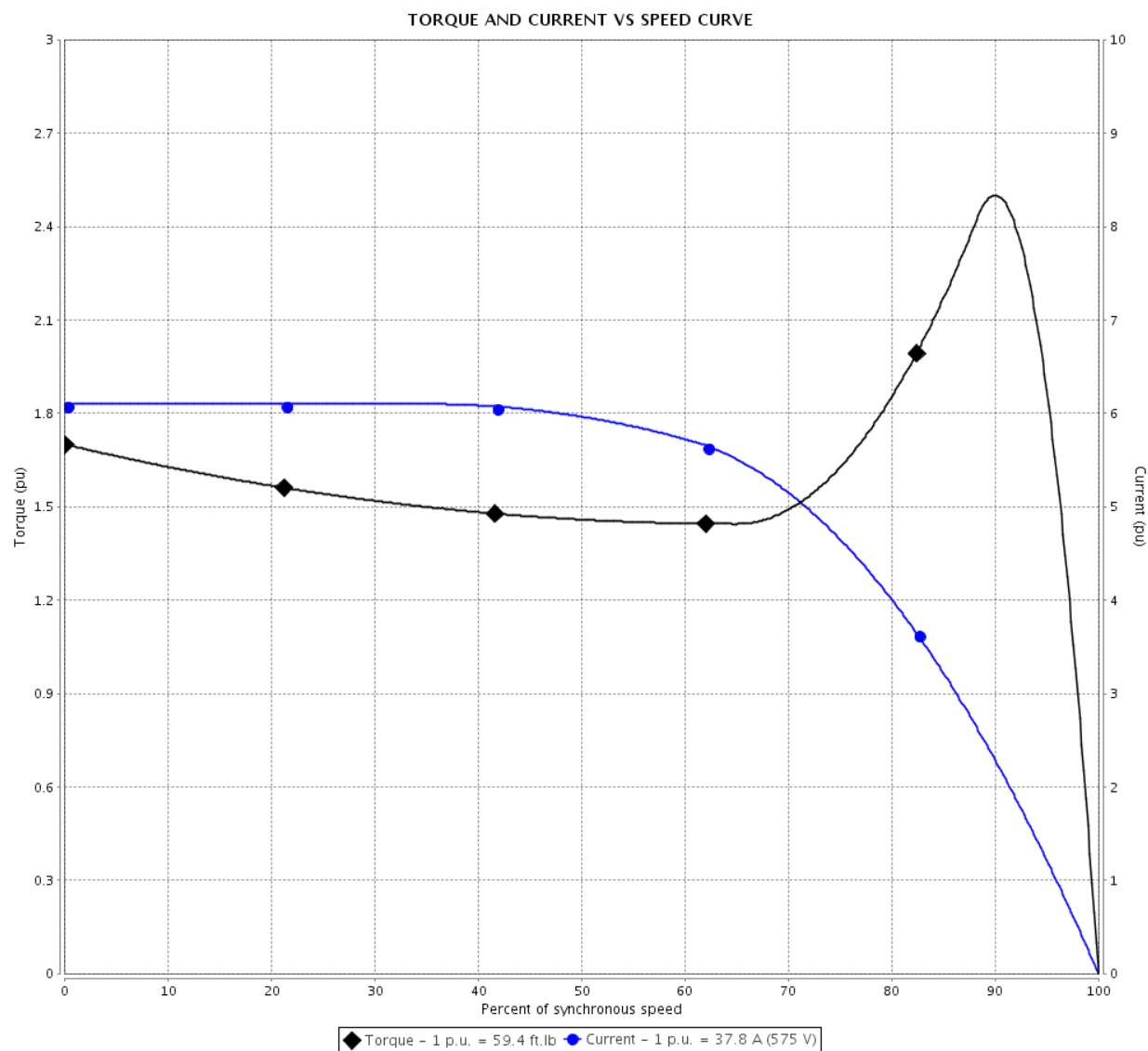
Product line : W40 High Efficiency Three-Phase

Product code :

14491995

Catalog # :

04036OP3HFP286TSC-W4



Performance : 575 V 60 Hz 2P

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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

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Rev.	Changes Summary	Performed	Checked	Date
Performed by		<div>Page</div> <div>2 / 6</div> <div>Revision</div>		
Checked by				
Date	10/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

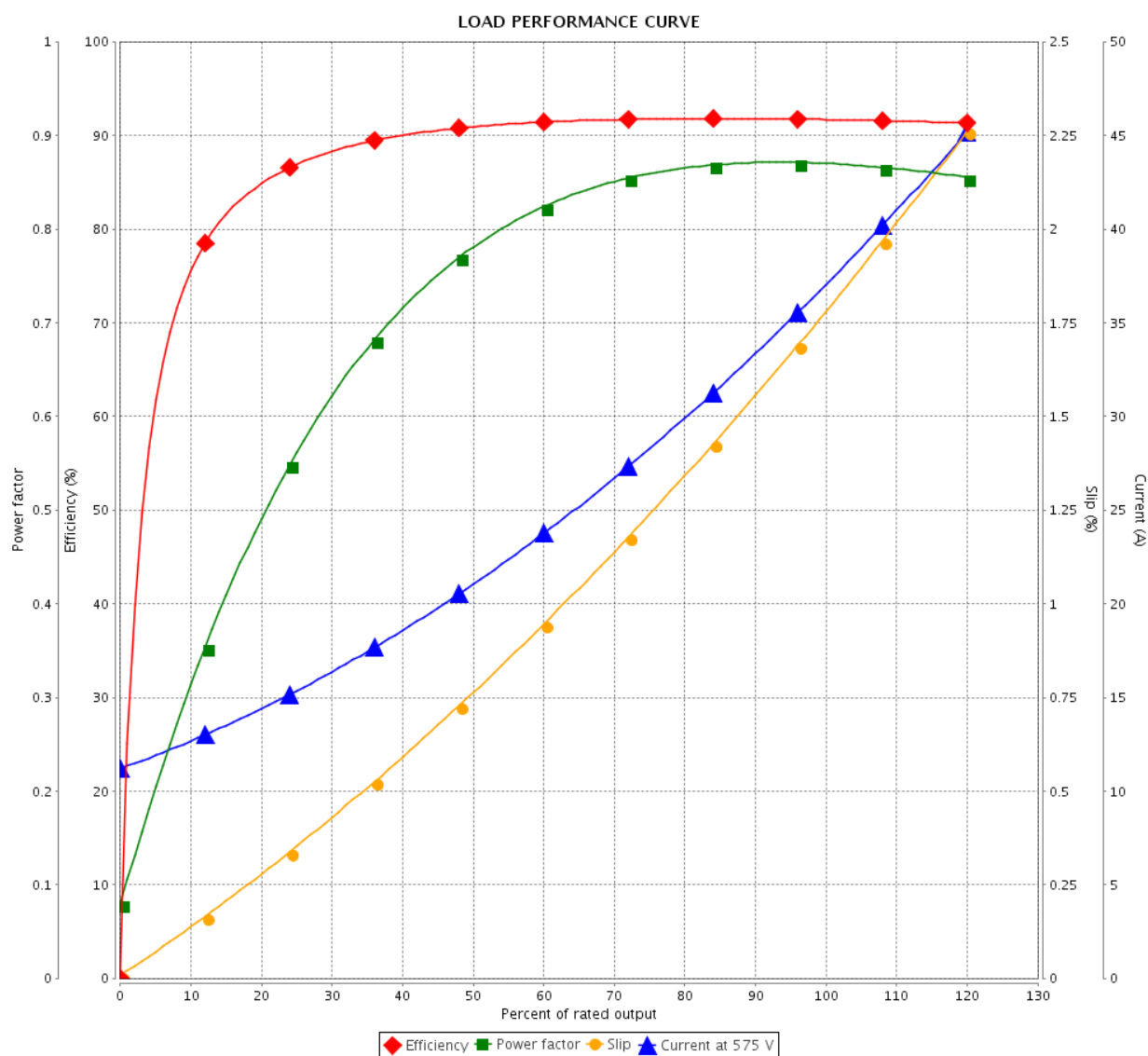
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Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 6Revision		
Checked by				
Date	10/04/2020			

THERMAL LIMIT CURVE

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Heating constant

Cooling constant

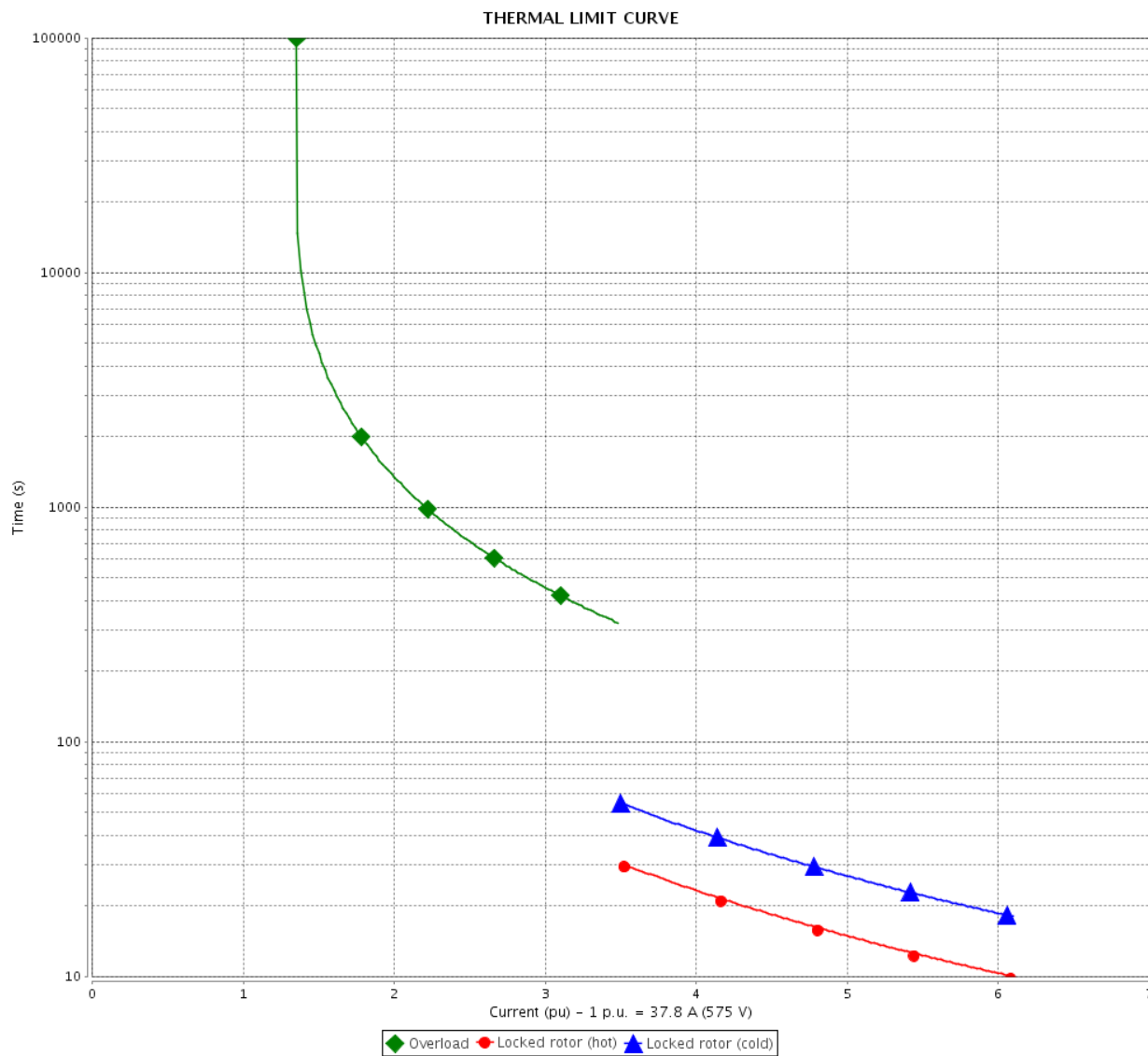
Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by					
Date	10/04/2020			4 / 6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 5 / 6	Revision
Checked by					
Date	10/04/2020				

VFD OPERATION CURVE

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Customer :

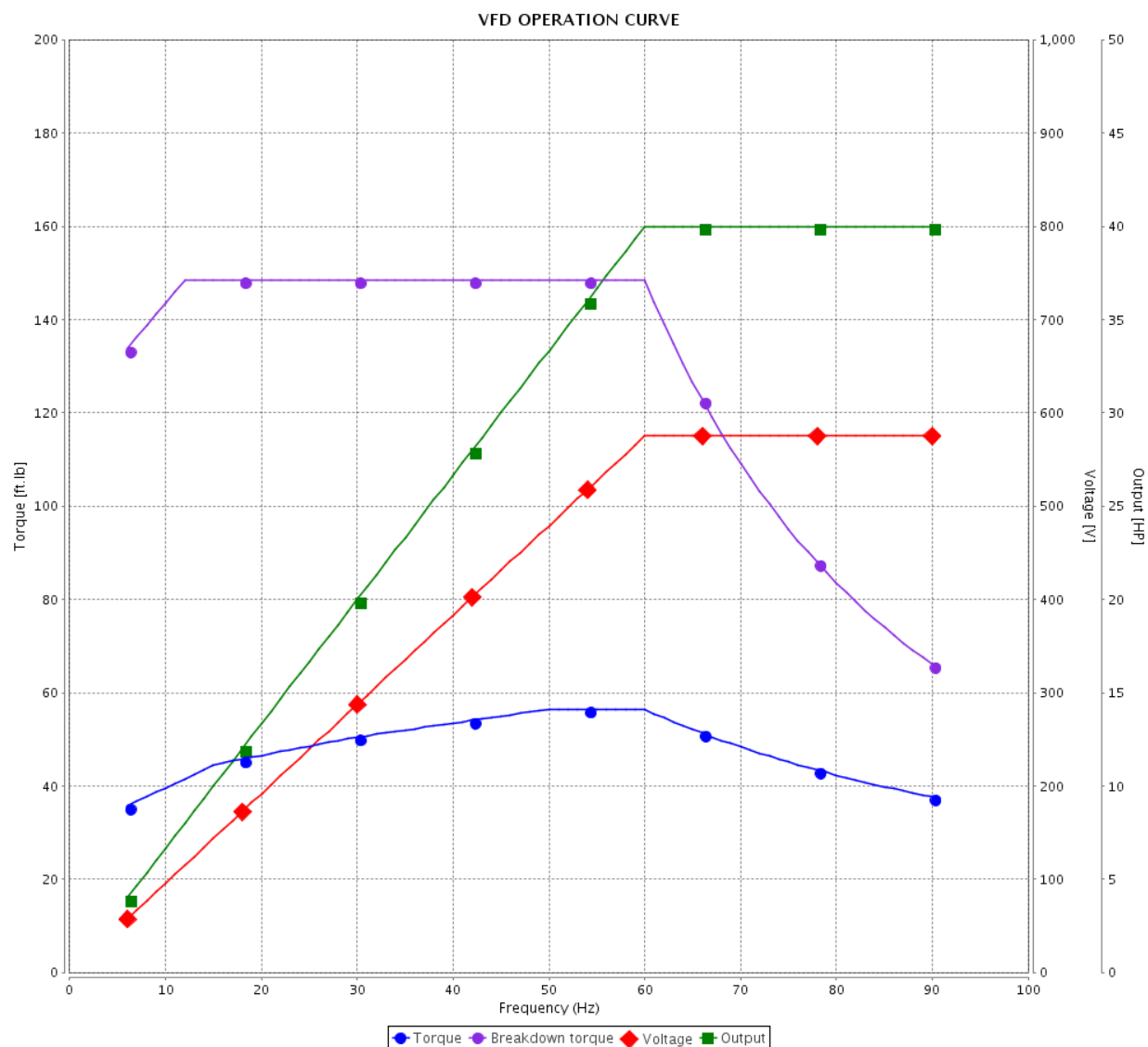
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Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				6 / 6	
Date					

**W40***Severe Duty*

PH	FR	HP(kW)		Hz	 Δ			
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			