

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 High Efficiency Three-Phase Product code : 14490663  
Catalog # : 03018OP3VFP286TS-W40

Frame	: 284/6TS	Locked rotor time	: 39s (cold) 22s (hot)
Output	: 30 HP (22 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 200/400 V	Altitude	: 1000 m.a.s.l.
Rated current	: 81.9/40.9 A	Protection degree	: IP23
L. R. Amperes	: 516/258 A	Cooling method	: IC01 - ODP
LRC	: 6.3x(Code F)	Mounting	: F-1
No load current	: 25.3/12.7 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1765 rpm	Starting method	: Direct On Line
Slip	: 1.94 %	Approx. weight <sup>3</sup>	: 383 lb
Rated torque	: 89.3 ft.lb		
Locked rotor torque	: 250 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 3.70 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	91.5	91.7	92.4	92.4	Max. traction
Power Factor	0.49	0.71	0.80	0.84	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.

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

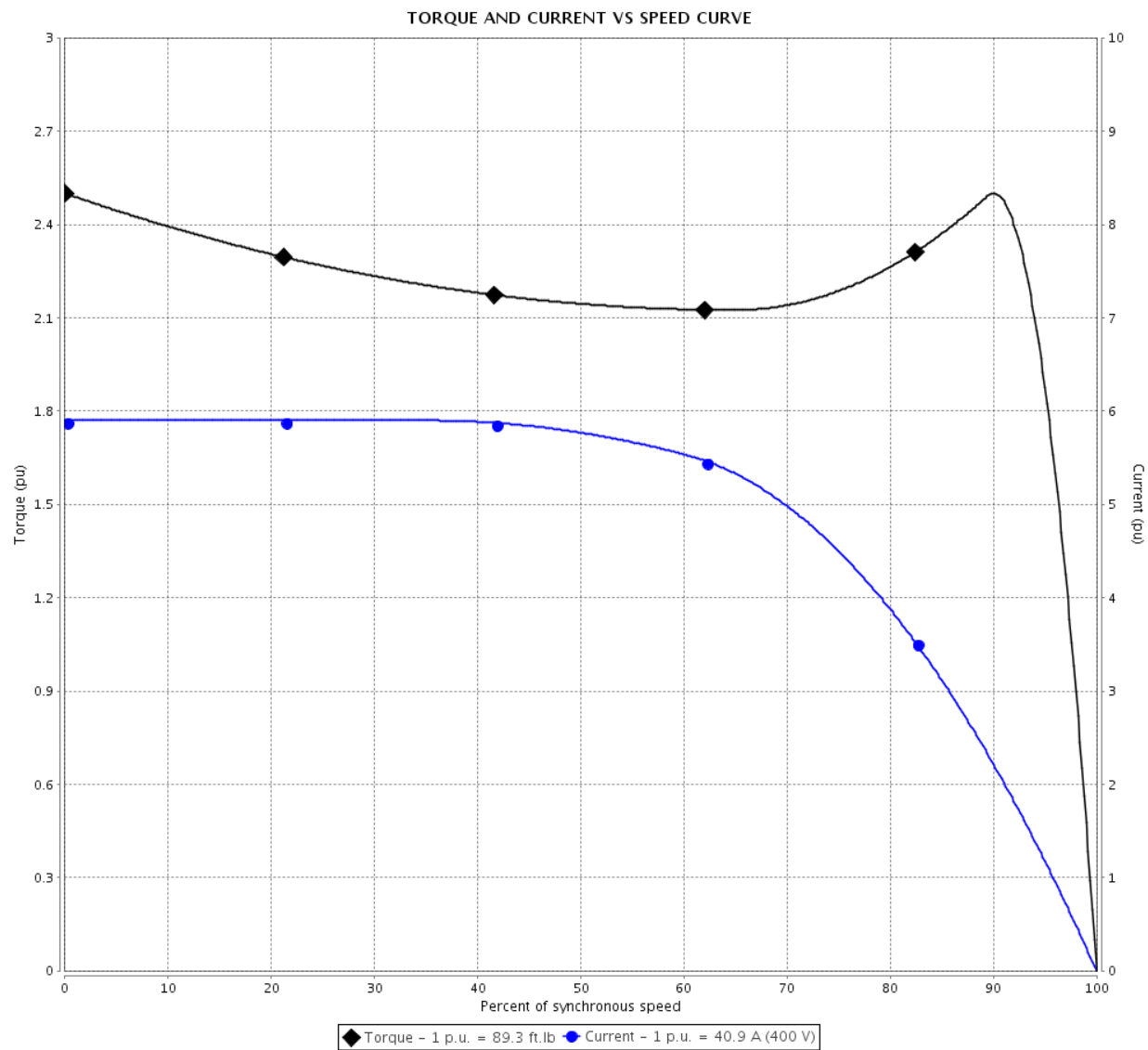
Product line : W40 High Efficiency Three-Phase

Product code :

14490663

Catalog # :

03018OP3VFP286TS-W40



Performance : 200/400 V 60 Hz 4P

Rated current : 81.9/40.9 A  
LRC : 6.3  
Rated torque : 89.3 ft.lb  
Locked rotor torque : 250 %  
Breakdown torque : 250 %  
Rated speed : 1765 rpm

Moment of inertia (J) : 3.70 sq.ft.lb  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.15  
Temperature rise : 80 K  
Design : B

Locked rotor time : 39s (cold) 22s (hot)

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Date	11/04/2020			

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

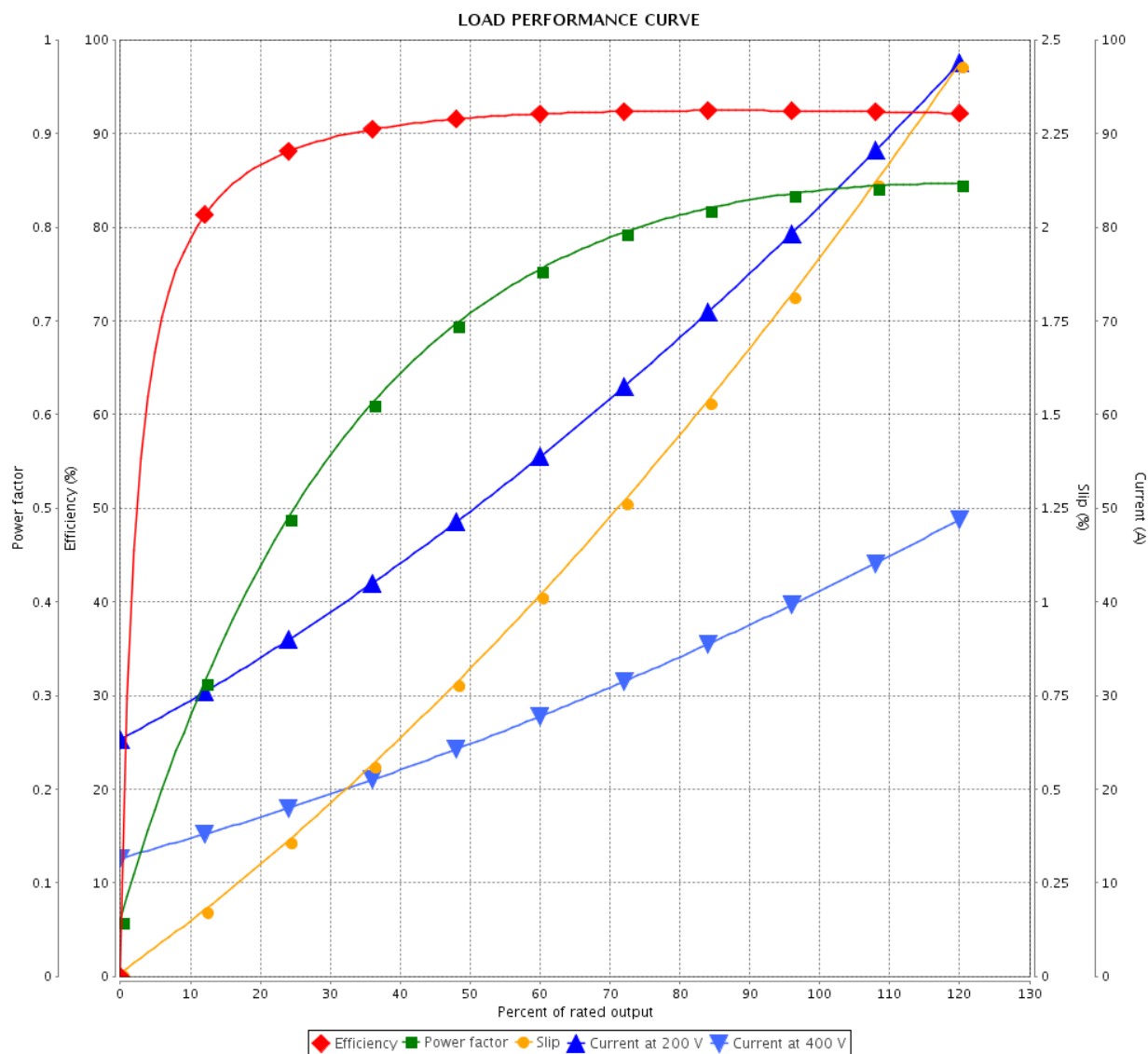
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Product code :

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Performance : 200/400 V 60 Hz 4P

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 LRC : 6.3  
 Rated torque : 89.3 ft.lb  
 Locked rotor torque : 250 %  
 Breakdown torque : 250 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 3.70 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

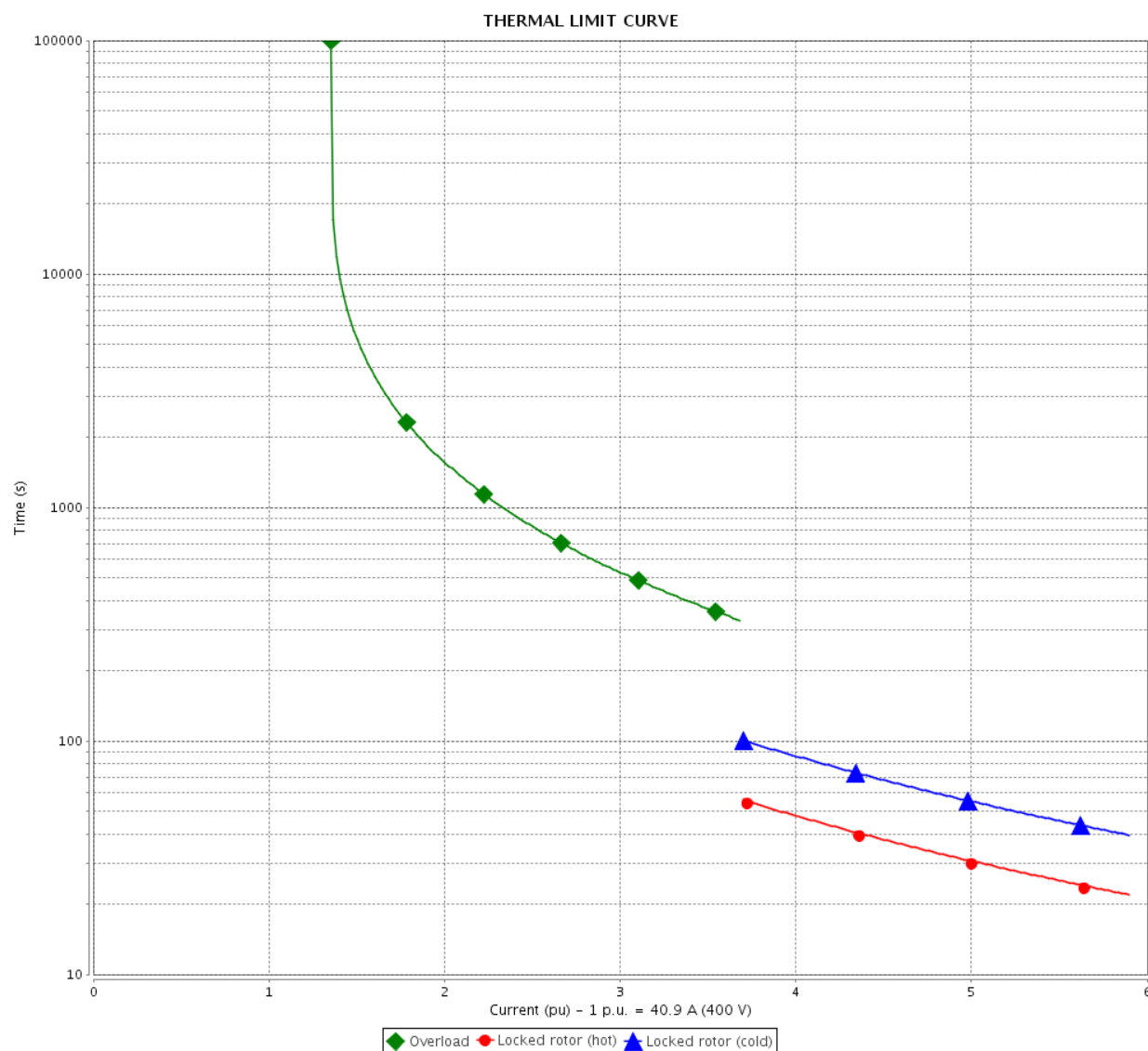
Product line : W40 High Efficiency Three-Phase

Product code :

14490663

Catalog # :

03018OP3VFP286TS-W40



Performance : 200/400 V 60 Hz 4P

Rated current : 81.9/40.9 A

LRC : 6.3

Rated torque : 89.3 ft.lb

Locked rotor torque : 250 %

Breakdown torque : 250 %

Rated speed : 1765 rpm

Moment of inertia (J) : 3.70 sq.ft.lb

Duty cycle : Cont.(S1)

Insulation class : F

Service factor : 1.15

Temperature rise : 80 K

Design : B

Heating constant

Cooling constant

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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

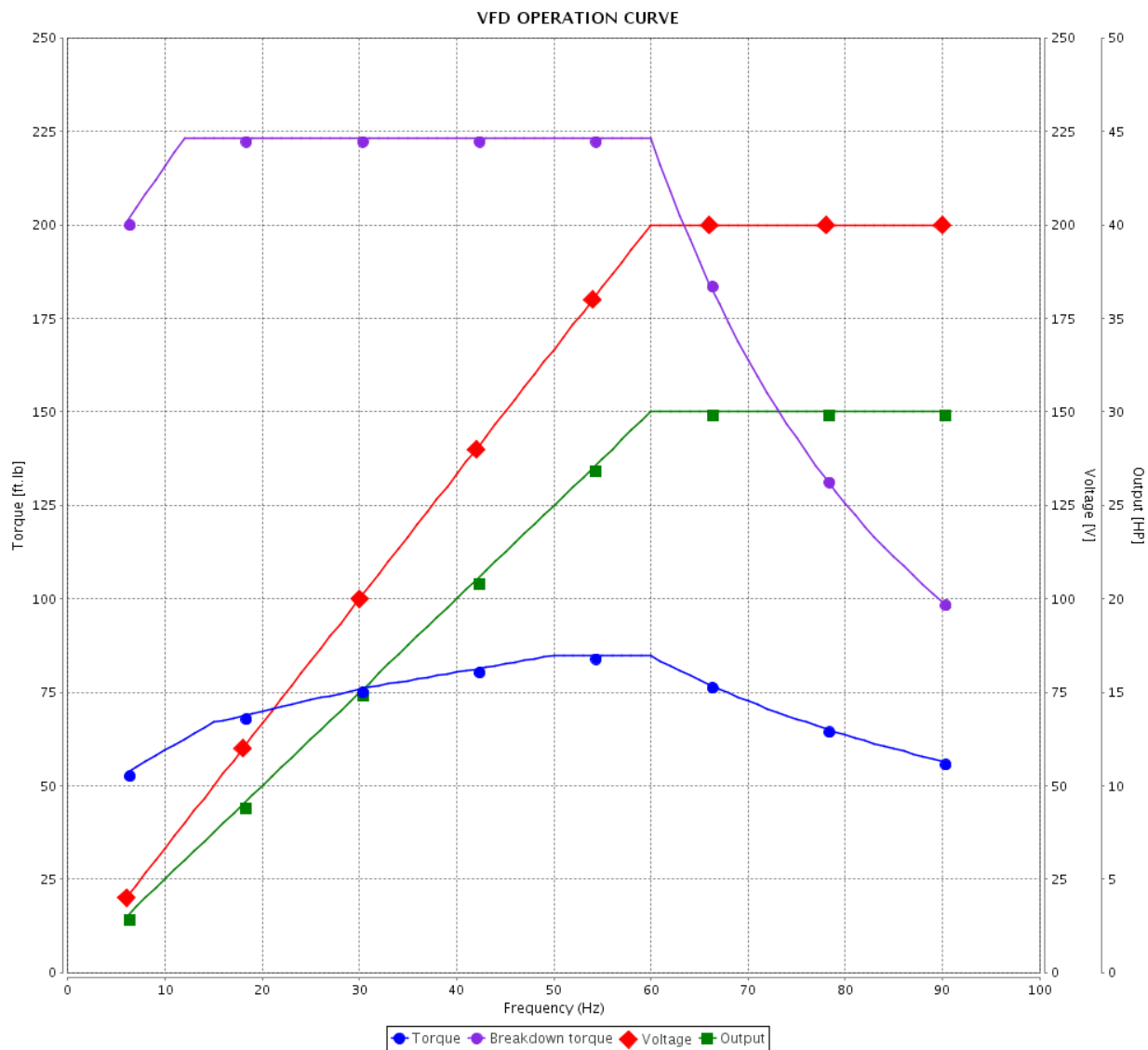
Product line : W40 High Efficiency Three-Phase

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Moment of inertia (J) : 3.70 sq.ft.lb  
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