### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 JM Pump High Efficiency Product code: 14832336 Three-Phase 03018OP3EFP286JMV-Catalog #: Frame : 284/6JM Locked rotor time : 39s (cold) 22s (hot) Output : 30 HP (22 kW) Temperature rise : 80 K : Cont.(S1) Poles : 4 Duty cycle Ambient temperature : -20°C to +40°C Frequency : 60 Hz : 230/460 V Rated voltage Altitude : 1000 m.a.s.l. Protection degree Rated current : 71.2/35.6 A : IP23 : IC01 - ODP L. R. Amperes : 449/224 A Cooling method **LRC** : 6.3x(Code F) Mounting : W-6 No load current : 22.0/11.0 A Rotation<sup>1</sup> : Both (CW and CCW) Rated speed Starting method : Direct On Line : 1765 rpm Slip : 1.94 % Approx. weight<sup>3</sup> : 396 lb Rated torque : 89.3 ft.lb : 250 % Locked rotor torque 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

Drive end<br/>Bearing typeNon drive end<br/>6311 Z C3Non drive end<br/>6211 Z C3Sealing: Without Bearing Seal<br/>Lubrication interval: Without Bearing Seal<br/>20000 hWithout Bearing Seal<br/>20000 h

Lubricant amount : 18 g 11 g

Lubricant type : Mobil Polyrex EM

Notes

USABLE @208V 78.7A SF 1.00 SFA 78.7A

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					
Checked by				Page	Revision
Date	10/04/2020			1/6	

### TORQUE AND CURRENT VS SPEED CURVE

#### Three Phase Induction Motor - Squirrel Cage



Customer :

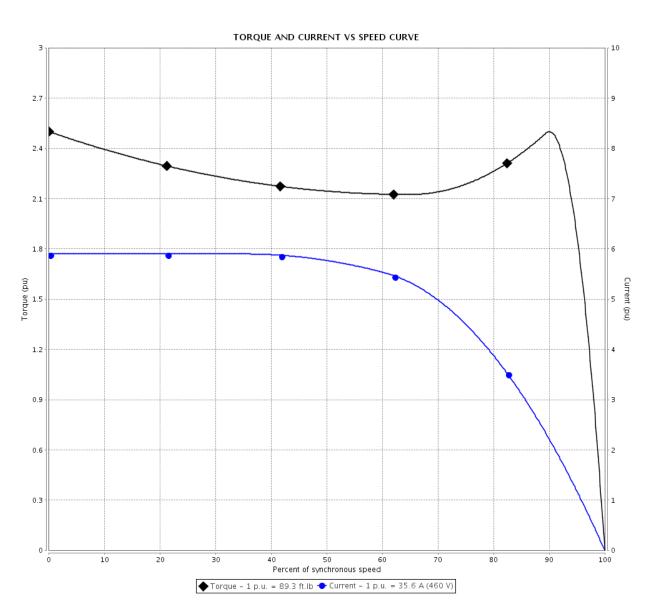
Product line : W40 JM Pump High Efficiency

Three-Phase

Product code: 14832336

Catalog #: 03018OP3EFP286JMV-

W4



: 230/460 V 60 Hz 4P Performance Rated current : 71.2/35.6 A Moment of inertia (J) : 3.70 sq.ft.lb **LRC** : 6.3 Duty cycle : Cont.(S1) Insulation class Rated torque : 89.3 ft.lb : F Locked rotor torque : 250 % Service factor : 1.15 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1765 rpm Design : B

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

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

## LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer

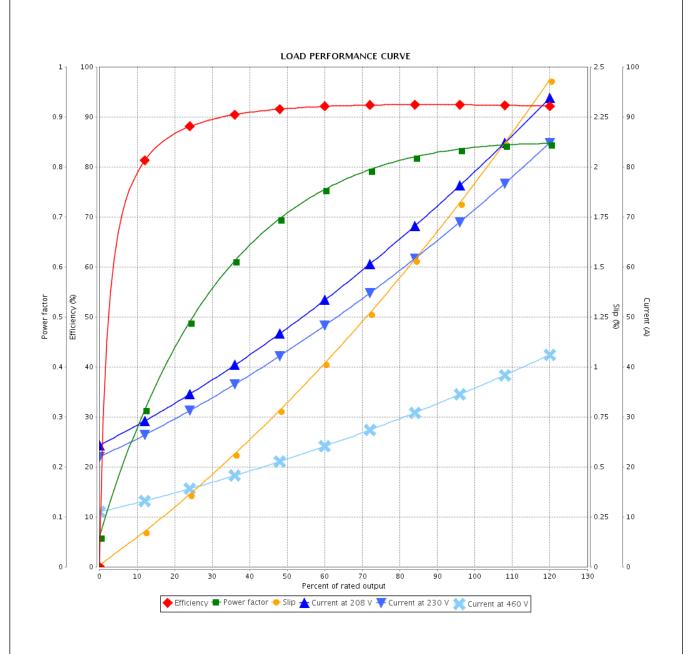
Product line : W40 JM Pump High Efficiency

Three-Phase

Product code: 14832336

Catalog #: 03018OP3EFP286JMV-

W4



Performance	: 2	230/460 V 60 Hz 4P				
Rated current		71.2/35.6 A	Moment of inertia (J)		: 3.70 sq.ft.lb	
LRC : 6.		3.3	Duty cycle	Duty cycle		
Rated torque : 8		39.3 ft.lb	Insulation class		: Cont.(S1) : F	
•		250 %	Service fa	Service factor		
Breakdown torque		250 %	Temperat	Temperature rise		
Rated speed	: 1	765 rpm Design		: B		
Rev.		Changes Summary	У	Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	10/04/2020				3/6	

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



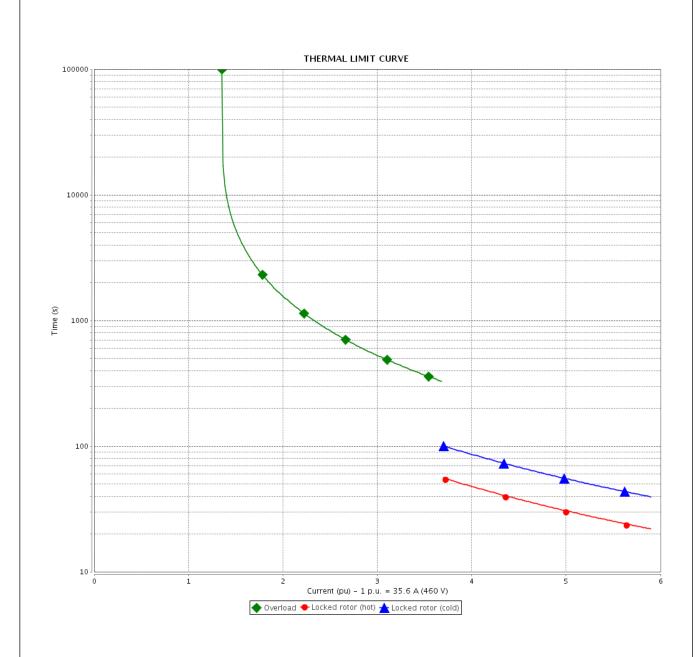
Customer	:				_	
Product line	: \	N40 JM Pump High Efficier nree-Phase	ncy I	Product code :	14832336	
	.,	iree-Phase	(	Catalog # :	03018OP3EF W4	P286JMV-
Performance	: 23	30/460 V 60 Hz 4P				
Rated current	: 7′ : 6.	1.2/35.6 A	Moment of	f inertia (J)	: 3.70 sq.ft.lb	
LRC Rated torque	: 89	9.3 ft.lb	Duty cycle Insulation	class	: Cont.(S1) : F	
Locked rotor torque Breakdown torque		50 % 50 %	Service far Temperatu		: 1.15 : 80 K	
Rated speed		765 rpm	Design	ii o 1130	: B	
Heating constant						
Cooling constant			-			
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
D-4	40/04/0000	-			4.40	

# THERMAL LIMIT CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer



Rev.		Changes Summary	Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	10/04/2020	1		5/6	

## VFD OPERATION CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 JM Pump High Efficiency

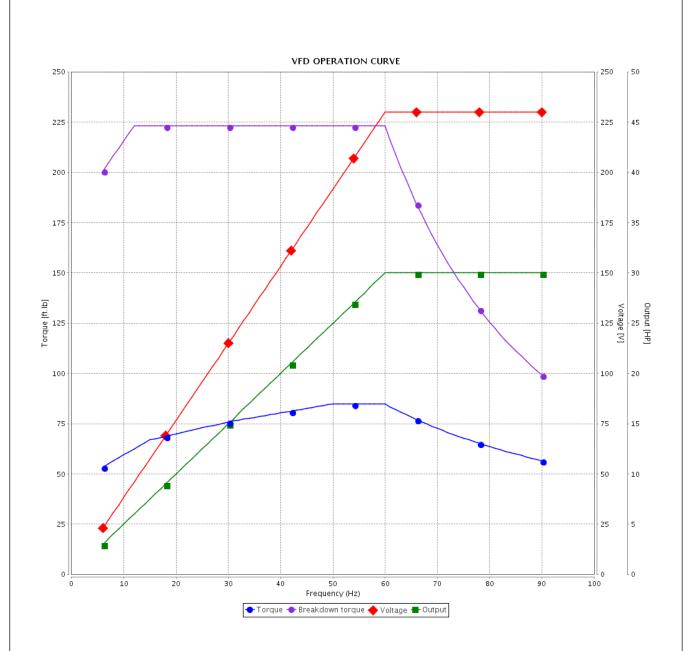
Three-Phase

Product code: 14832336

Catalog #: 03018OP3EFP286JMV-

W4

6/6



Performance	: 230/460 V 60 Hz 4P				
Rated current	: 71.2/35.6 A	Moment of inertia (J)		: 3.70 sq.ft.lb	
LRC	: 6.3	Duty cycle		: Cont.(S1)	
Rated torque	: 89.3 ft.lb	Insulation class		: F	
Locked rotor torque	: 250 %	Service factor		: 1.15	
Breakdown torque	: 250 %	Temperature rise		: 80 K	
Rated speed	: 1765 rpm	Design		: B	
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision

10/04/2020

Date

