DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 NEMA Premium Efficiency Product code: 14496951 Three-Phase Catalog #: 04018OT3V324TS-W40 Frame : 324TS Locked rotor time : 23s (cold) 13s (hot) Output : 40 HP (30 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 200/400 V : 1000 m.a.s.l. Altitude Rated current : 109/54.7 A Protection degree : IP23 L. R. Amperes : 679/339 A Cooling method : IC01 - ODP LRC : 6.2x(Code G) Mounting : F-1 No load current : 42.5/21.3 A Rotation¹ : Both (CW and CCW) Rated speed : 1775 rpm Noise level² : 66.0 dB(A) Starting method Slip : 1.39 % : Direct On Line Rated torque : 118 ft.lb Approx. weight³ : 507 lb Locked rotor torque : 200 % : 240 % Breakdown torque Insulation class : F Service factor : 1.25 Moment of inertia (J) : 5.69 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 93.5 Efficiency (%) 93.6 94.1 94.1 Max. traction Power Factor 0.44 0.80 0.84 0.70 Max. compression Non drive end Drive end Bearing type 6312 Z C3 6211 Z C3 Sealing Without Bearing Seal Without Bearing Seal Lubrication interval 20000 h 20000 h

Lubricant amount 21 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					
Checked by				Page	Revision
Date	12/04/2022			1/6	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



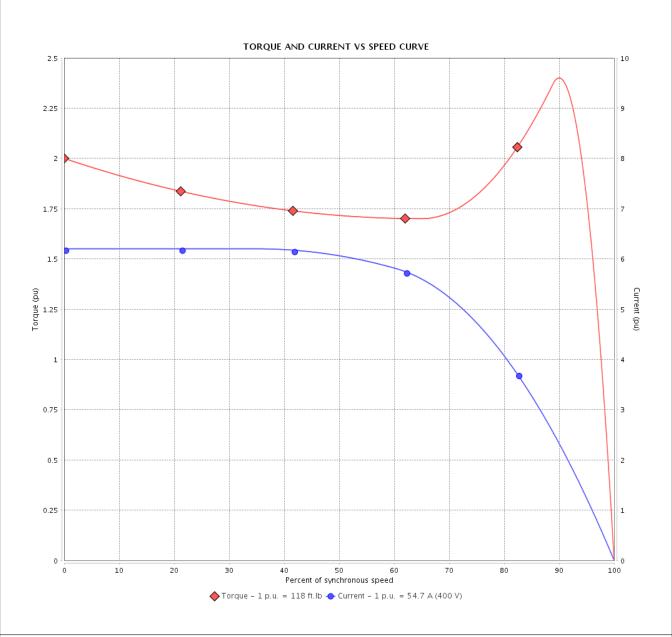
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14496951

Catalog #: 04018OT3V324TS-W40



: 200/400 V 60 Hz 4P Performance Rated current : 109/54.7 A Moment of inertia (J) : 5.69 sq.ft.lb **LRC** : 6.2 Duty cycle : Cont.(S1) Insulation class Rated torque : 118 ft.lb : F Service factor Locked rotor torque : 200 % : 1.25 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 1775 rpm Design : B

Locked rotor time : 23s (cold) 13s (hot)

Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			2/6	

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

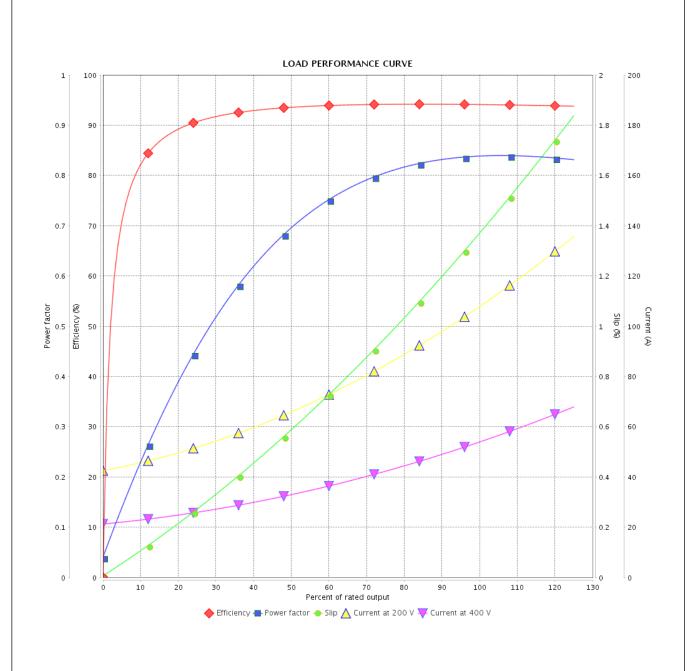


Customer

Product line : W40 NEMA Premium Efficiency Product code : 14496951

Three-Phase

Catalog #: 04018OT3V324TS-W40



Performance	: 2	: 200/400 V 60 Hz 4P						
Rated current	: 1	: 109/54.7 A Moment of		f inertia (J)	: 5.69 sq.ft.lb			
LRC	: 6	3.2	2 Duty cycle		: Cont.(S1)			
Rated torque	: 1	118 ft.lb	Insulation class		: F			
Locked rotor torque	e :2	200 %	Service factor		: 1.25			
Breakdown torque	: 2	: 240 % : 1775 rpm		Temperature rise				
Rated speed	: ′				: B			
Rev.		Changes Summary		Performed	Checked	Date		
Performed by								
Checked by					Page	Revision		
Date	12/04/2022				3/6			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



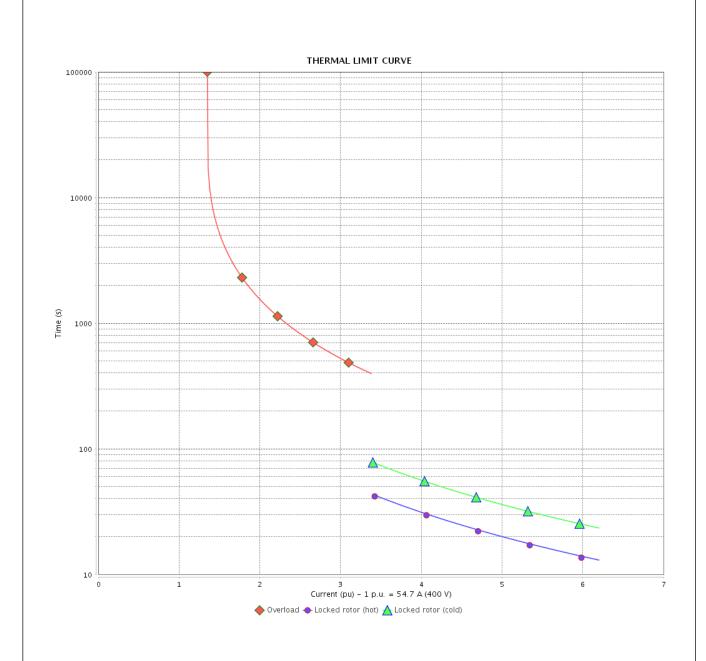
Customer		:			·	
Draduat line		: W40 NEMA Premium Efficie		Product code :	14406051	
Product line		Three-Phase	ысу	Froduct code .	14496951	
				Catalog # :	04018OT3V3	24TS-W40
Performance	:	200/400 V 60 Hz 4P				
Rated current		109/54.7 A 6.2	Moment o	of inertia (J)	: 5.69 sq.ft.lb	
LRC Rated torque		6.∠ 118 ft.lb	Duty cycle Insulation		: Cont.(S1) : F	
Locked rotor torc	jue :	200 %	Service fa	ctor	: 1.25	
Breakdown torqu	ie :	: 240 % Tempera		ure rise	: 80 K	
Rated speed	:	1775 rpm	Design		: B	
Heating constant						
Cooling constant						
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by					Page	Revision
Date	12/04/2022				4/6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	12/04/2022			5/6	

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Date

12/04/2022

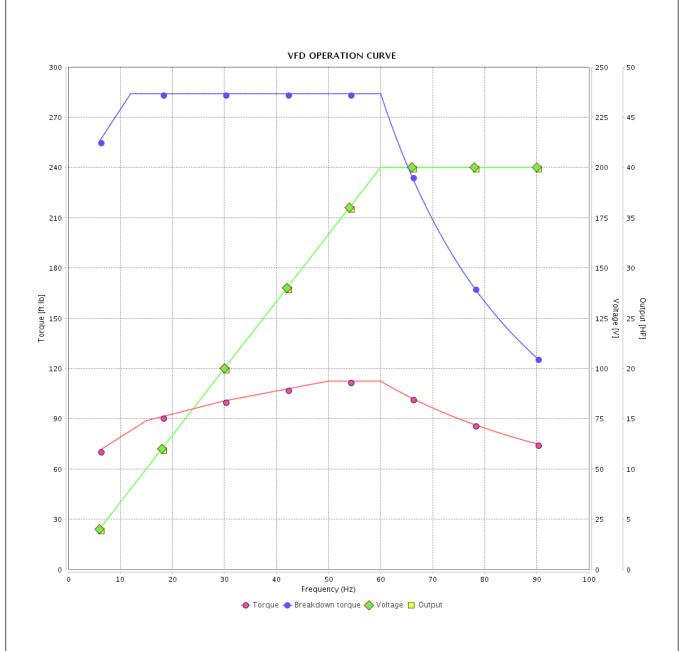
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14496951

Catalog #: 04018OT3V324TS-W40

6/6



Performance : 200/400 V 60 Hz 4P : 109/54.7 A Rated current Moment of inertia (J) : 5.69 sq.ft.lb **LRC** : 6.2 Duty cycle : Cont.(S1) Insulation class : 118 ft.lb : F Rated torque Locked rotor torque : 200 % Service factor : 1.25 Breakdown torque : 240 % Temperature rise : 80 K Rated speed : 1775 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

