DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer Product line : W40 NEMA Premium Efficiency Product code: 14272920 Three-Phase Catalog #: 10018OT3H404T-W40G Frame : 404/5T Locked rotor time : 21s (cold) 12s (hot) Output : 100 HP (75 kW) Temperature rise : 80 K Poles Duty cycle : Cont.(S1) : -20°C to +40°C Frequency : 60 Hz Ambient temperature Rated voltage : 575 V : 1000 m.a.s.l. Altitude Rated current : 92.0 A Protection degree : IP23 L. R. Amperes : 626 A Cooling method : IC01 - ODP : 6.8x(Code G) LRC Mounting : F-1 No load current : 31.8 A Rotation¹ : Both (CW and CCW) Rated speed : 1780 rpm Noise level² : 69.0 dB(A) Starting method Slip : 1.11 % : Direct On Line Rated torque : 295 ft.lb Approx. weight³ : 992 lb Locked rotor torque : 200 % Breakdown torque : 250 % Insulation class : F Service factor : 1.25 Moment of inertia (J) : 21.9 sq.ft.lb Design : B 25% 50% 75% 100% Output Foundation loads 94.9 95.4 Efficiency (%) 95.0 95.4 Max. traction : 1716 lb Power Factor 0.86 : 2708 lb 0.49 0.75 0.83 Max. compression Non drive end Drive end Bearing type 6316 C3 6212 Z C3

Bearing type : 6316 C3 6212 Z C3
Sealing : Without Bearing Seal
Lubrication interval : 20000 h
Lubricant amount : 34 g 13 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



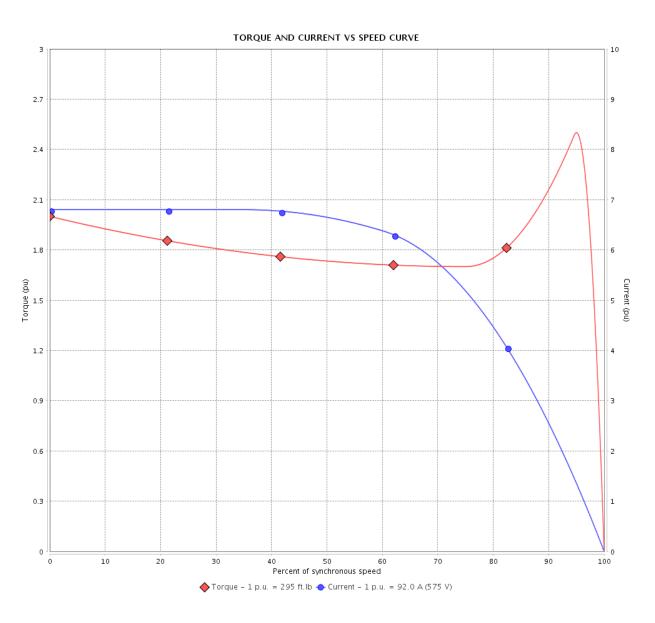
Customer :

Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272920

Catalog #: 10018OT3H404T-W40G



Performance : 575 V 60 Hz 4P Rated current : 92.0 A Moment of inertia (J) : 21.9 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) Insulation class Rated torque : 295 ft.lb : F Service factor Locked rotor torque : 200 % : 1.25 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B

Locked rotor time : 21s (cold) 12s (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



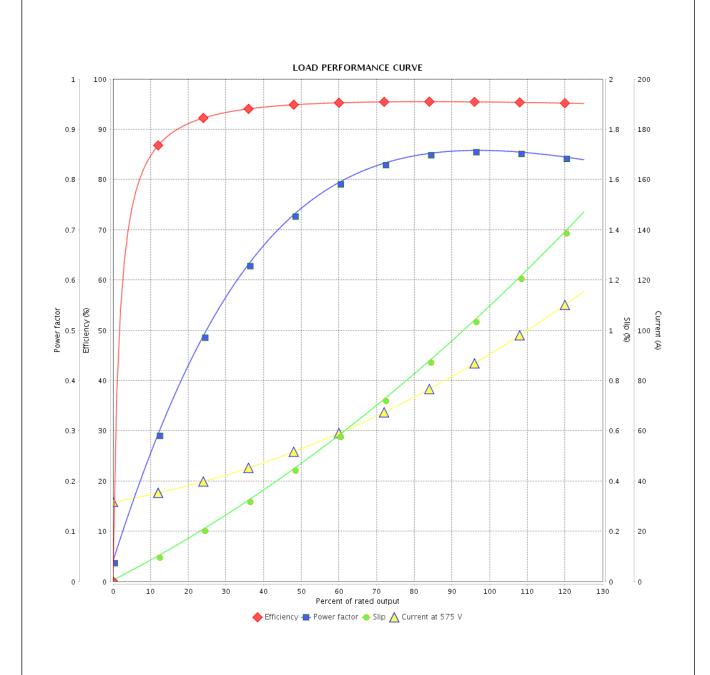
Customer

Product line : W40 NEMA Premium Efficiency Product code:

Three-Phase

14272920

Catalog #: 10018OT3H404T-W40G



Performance	: 5	75 V 60 Hz 4P				
Rated current	: 9	2.0 A Moment of inertia (J)		: 21.9 sq.ft.lb		
LRC		: 6.8 Du)	: Cont.(S1)	
Rated torque	: 2	: 295 ft.lb Insulation class : 200 % Service factor : 250 % Temperature rise : 1780 rpm Design		class	: F	
Locked rotor torc	jue : 2			ctor	: 1.25	
Breakdown torqu	ie : 2			ure rise	: 80 K	
Rated speed	: 1				: B	
Rev.		Changes Summary		Performed	Checked	Date
Performed by						
Checked by		1			Page	Revision
Date	12/04/2022	1			3/6	

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



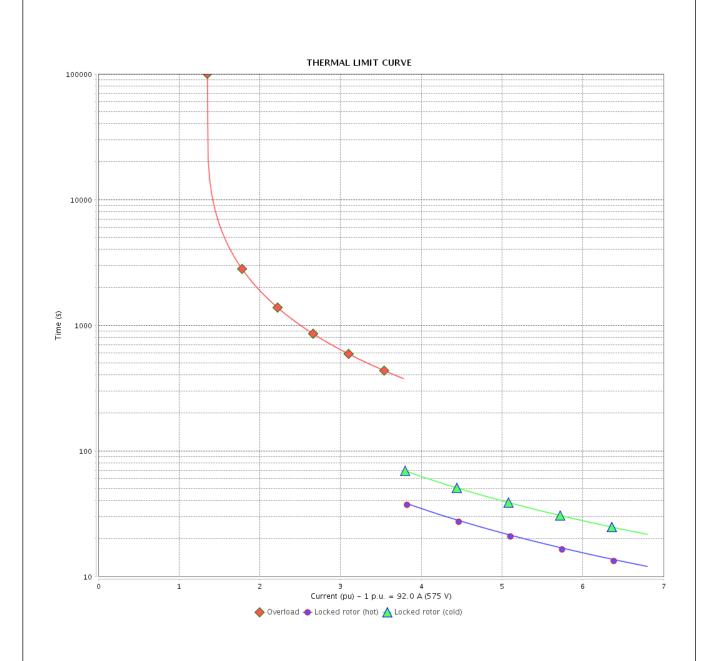
Customer	:	:					
Dec do et liere		- WAO NEMA Decesions Effici		Decident and a	4.4070000		
Product line		: W40 NEMA Premium Efficie Three-Phase	ency	Product code :	14272920		
				Catalog # :	10018OT3H4	04T-W40G	
Performance	::	575 V 60 Hz 4P					
Rated current		92.0 A	Moment o	f inertia (J)	: 21.9 sq.ft.lb		
LRC Rated torque		6.8 295 ft.lb		Duty cycle Insulation class		: Cont.(S1) : F	
Locked rotor tord	que : :	200 %	Service fa	ctor	: 1.25		
Breakdown torque		: 250 % Temperat : 1780 rpm Design		ure rise	: 80 K : B		
			Doolgii		. D		
Heating constan Cooling constan							
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

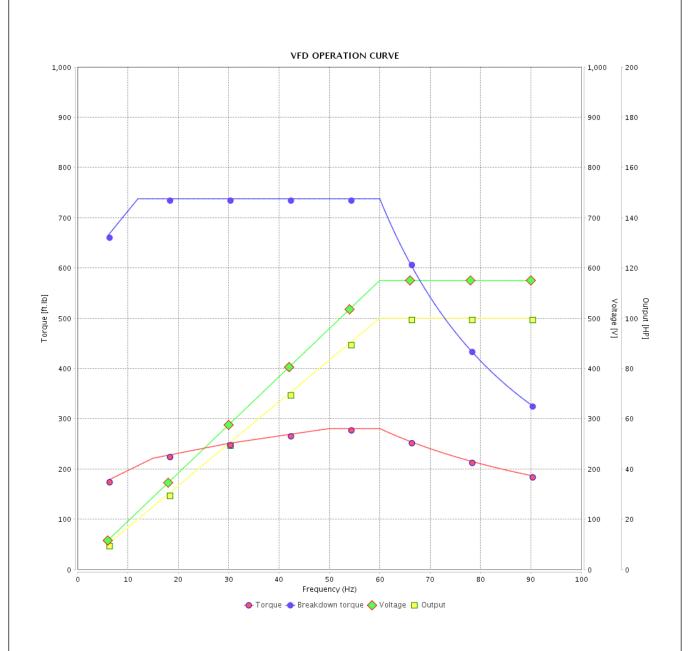
Product line : W40 NEMA Premium Efficiency

Three-Phase

Product code: 14272920

Catalog #: 10018OT3H404T-W40G

6/6



Performance : 575 V 60 Hz 4P Rated current : 92.0 A Moment of inertia (J) : 21.9 sq.ft.lb **LRC** : 6.8 Duty cycle : Cont.(S1) : 295 ft.lb Insulation class Rated torque : F Locked rotor torque : 200 % Service factor : 1.25 Breakdown torque : 250 % Temperature rise : 80 K Rated speed : 1780 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by Checked by Revision Page

