

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W40 NEMA Premium Efficiency Three-Phase Product code : 14496820
Catalog # : 04018OT3H324T-W40

Frame	: 324T	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 40 HP (30 kW)	Temperature rise	: 80 K
Poles	: 4	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	: 38.1 A	Protection degree	: IP23
L. R. Amperes	: 236 A	Cooling method	: IC01 - ODP
LRC	: 6.2x(Code G)	Mounting	: F-1
No load current	: 14.8 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1775 rpm	Noise level ²	: 66.0 dB(A)
Slip	: 1.39 %	Starting method	: Direct On Line
Rated torque	: 118 ft.lb	Approx. weight ³	: 441 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 5.69 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	93.5	93.6	94.1	94.1	Max. traction
Power Factor	0.44	0.70	0.80	0.84	Max. compression

		<u>Drive end</u>	<u>Non drive end</u>
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.

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Date	11/04/2020			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

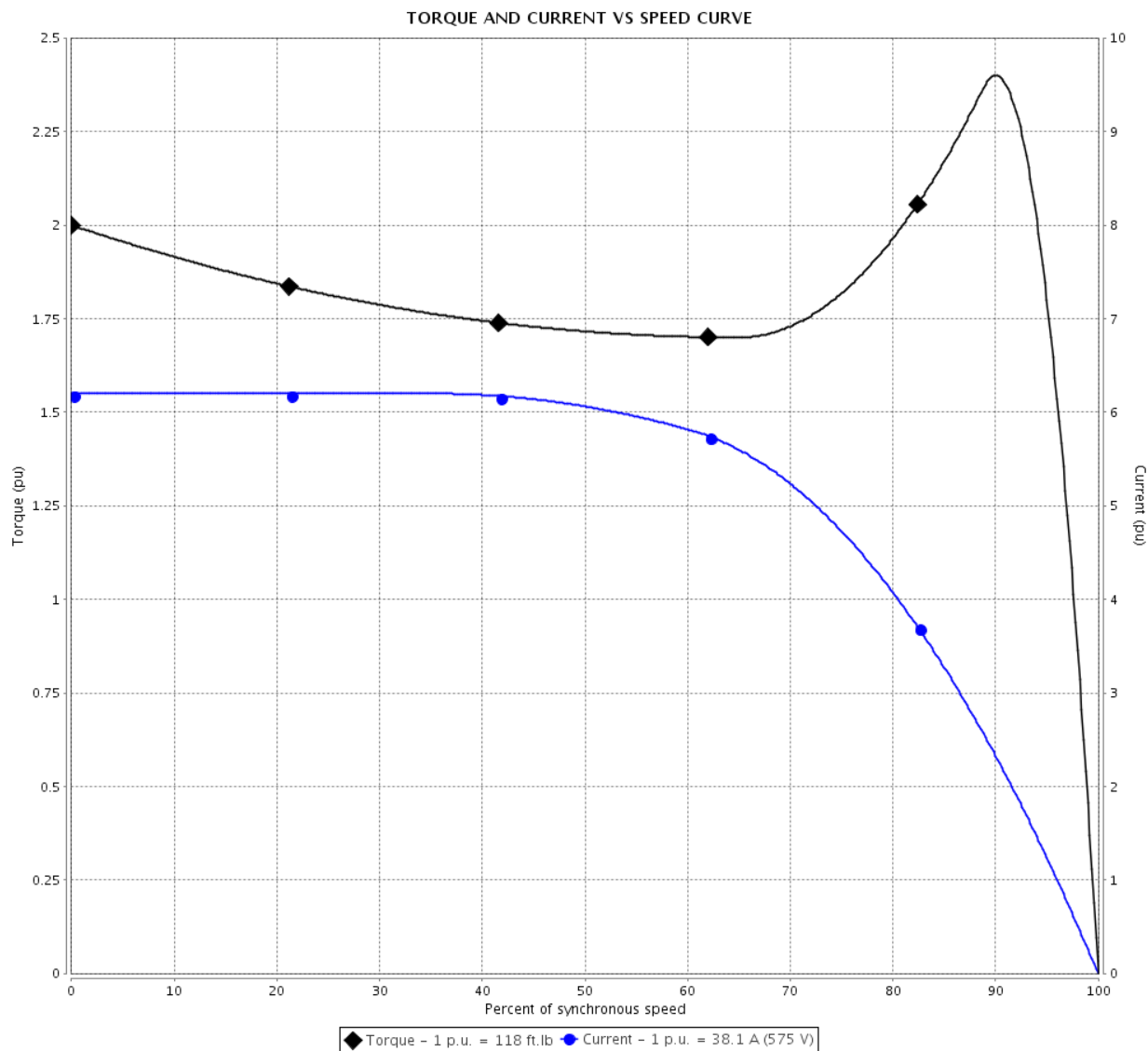


Customer :

Product line : W40 NEMA Premium Efficiency
Three-Phase

Product code : 14496820

Catalog # : 04018OT3H324T-W40



Performance : 575 V 60 Hz 4P

Rated current	: 38.1 A	Moment of inertia (J)	: 5.69 sq.ft.lb
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 118 ft.lb	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

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

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Date	11/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

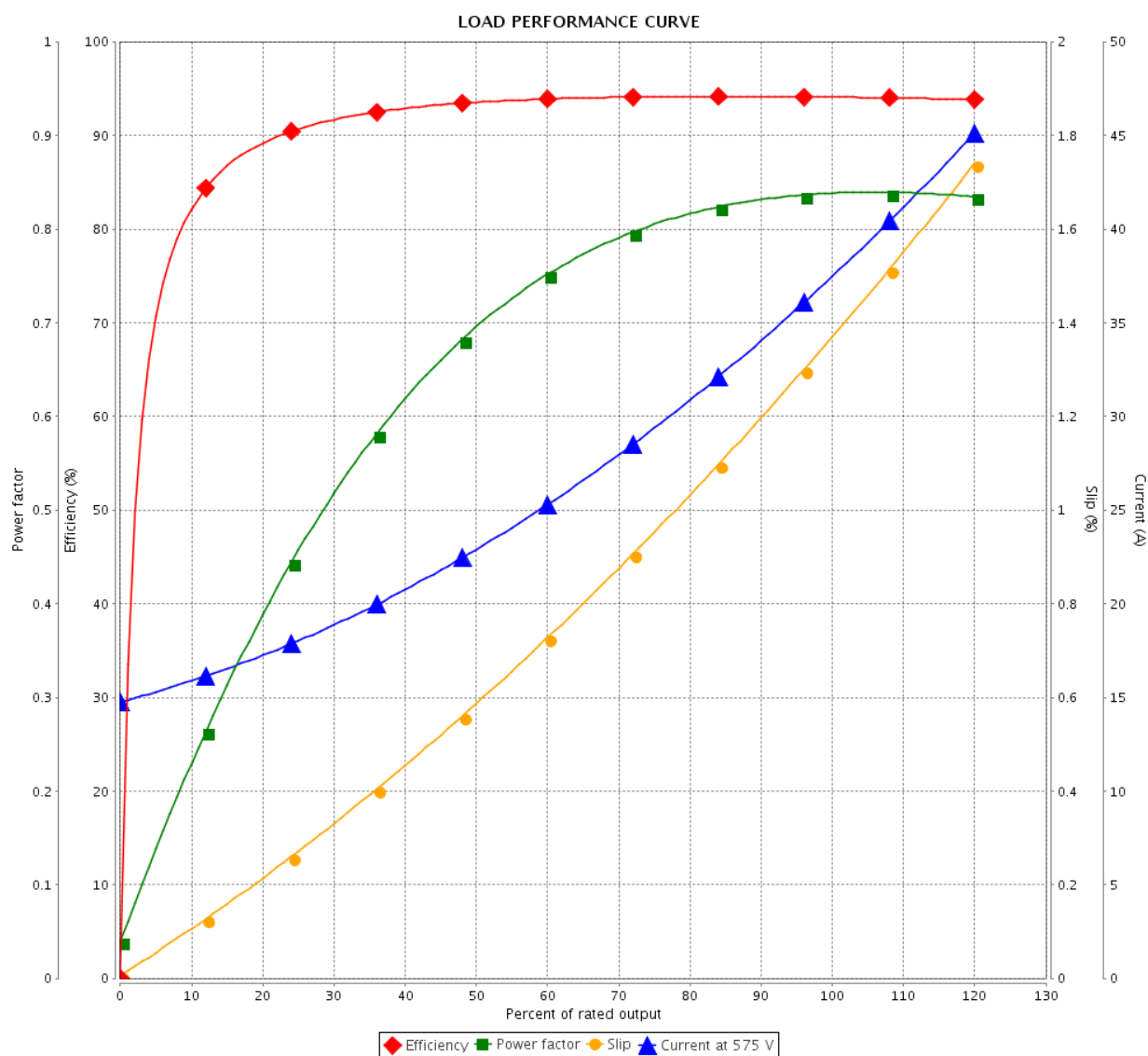


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Performance : 575 V 60 Hz 4P

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Rated speed : 1775 rpm

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Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



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: W40 NEMA Premium Efficiency
Three-Phase

Product code :

14496820

Catalog # :

04018OT3H324T-W40

Performance : 575 V 60 Hz 4P

Rated current

: 38.1 A

LRC

: 6.2

Rated torque

: 118 ft.lb

Locked rotor torque

: 200 %

Breakdown torque

: 240 %

Rated speed

: 1775 rpm

Moment of inertia (J)

: 5.69 sq.ft.lb

Duty cycle

: Cont.(S1)

Insulation class

: F

Service factor

: 1.25

Temperature rise

: 80 K

Design

: B

Heating constant

Cooling constant

Rev.

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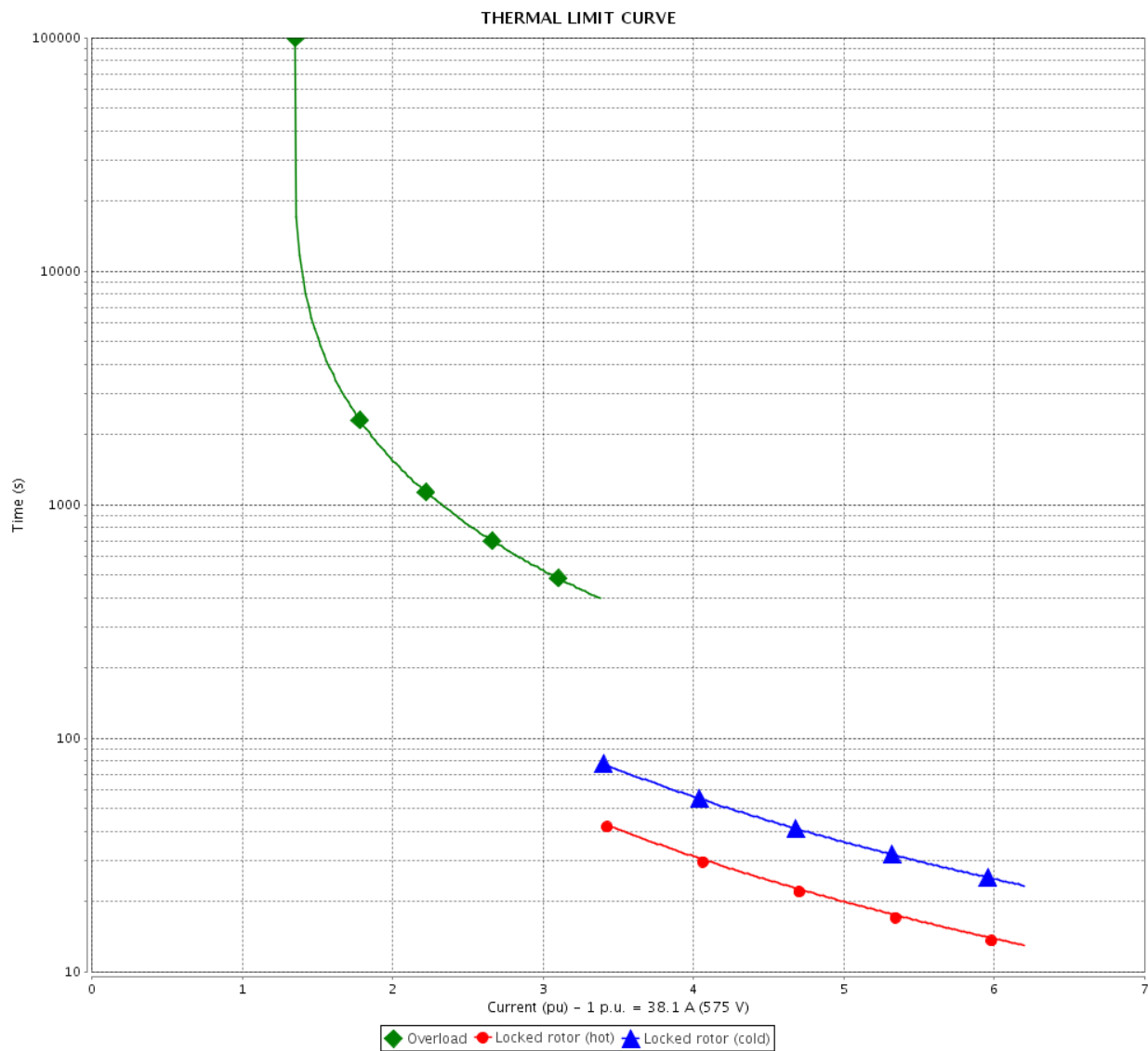
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

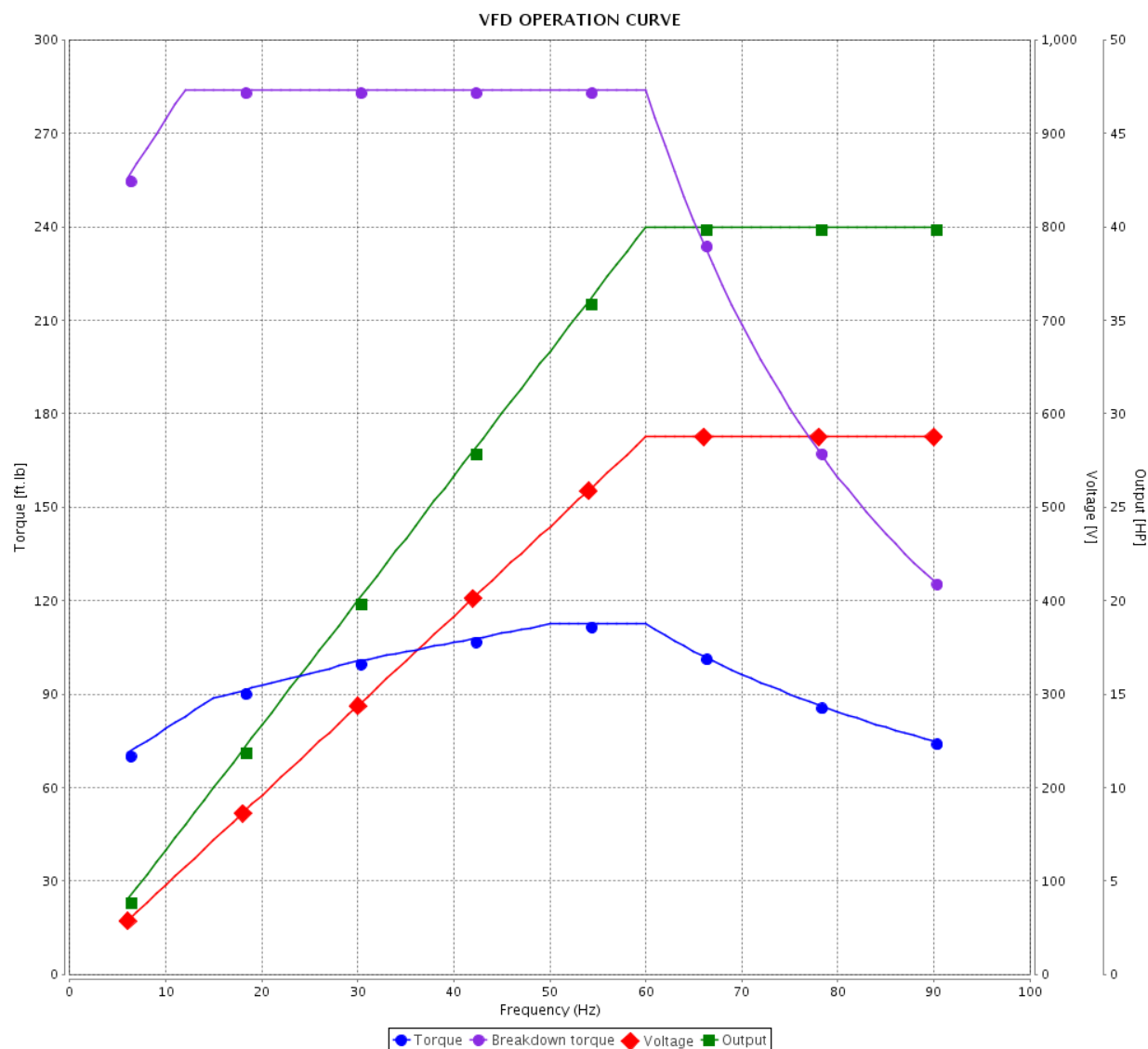


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Performance : 575 V 60 Hz 4P

Rated current : 38.1 A
LRC : 6.2
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