

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 12424291
Catalog # : 01512ST3QIE284TC-W22

Frame	: 284/6TC	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 15 HP (11 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 17.9 A	Protection degree	: IP56
L. R. Amperes	: 115 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 7.00 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1175 rpm	Noise level ²	: 59.0 dB(A)
Slip	: 2.08 %	Starting method	: Direct On Line
Rated torque	: 67.0 ft.lb	Approx. weight ³	: 409 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 7.85 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	90.8	91.0	91.7	91.7	Max. traction	: 676 lb
Power Factor	0.44	0.69	0.80	0.84	Max. compression	: 1085 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
8.6	6.9	6.2	4.3	2.8	1.8	1.2

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	Inpro/Seal	Inpro/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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			Revision	

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

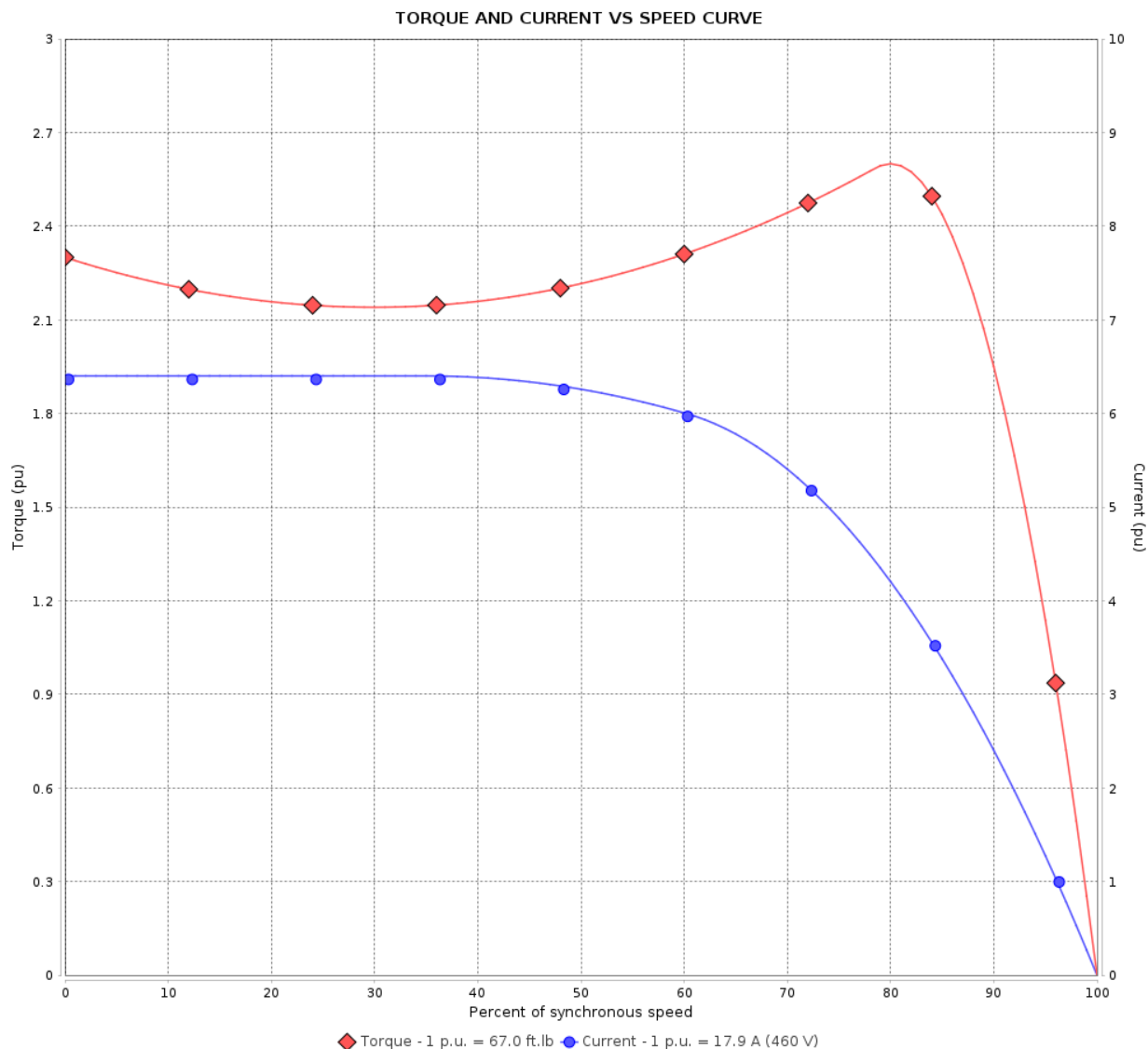


Customer :

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Catalog # : 01512ST3QIE284TC-W22



Performance : 460 V 60 Hz 6P

Rated current	: 17.9 A	Moment of inertia (J)	: 7.85 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 67.0 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1175 rpm	Design	: B

Locked rotor time : 36s (cold) 20s (hot)

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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

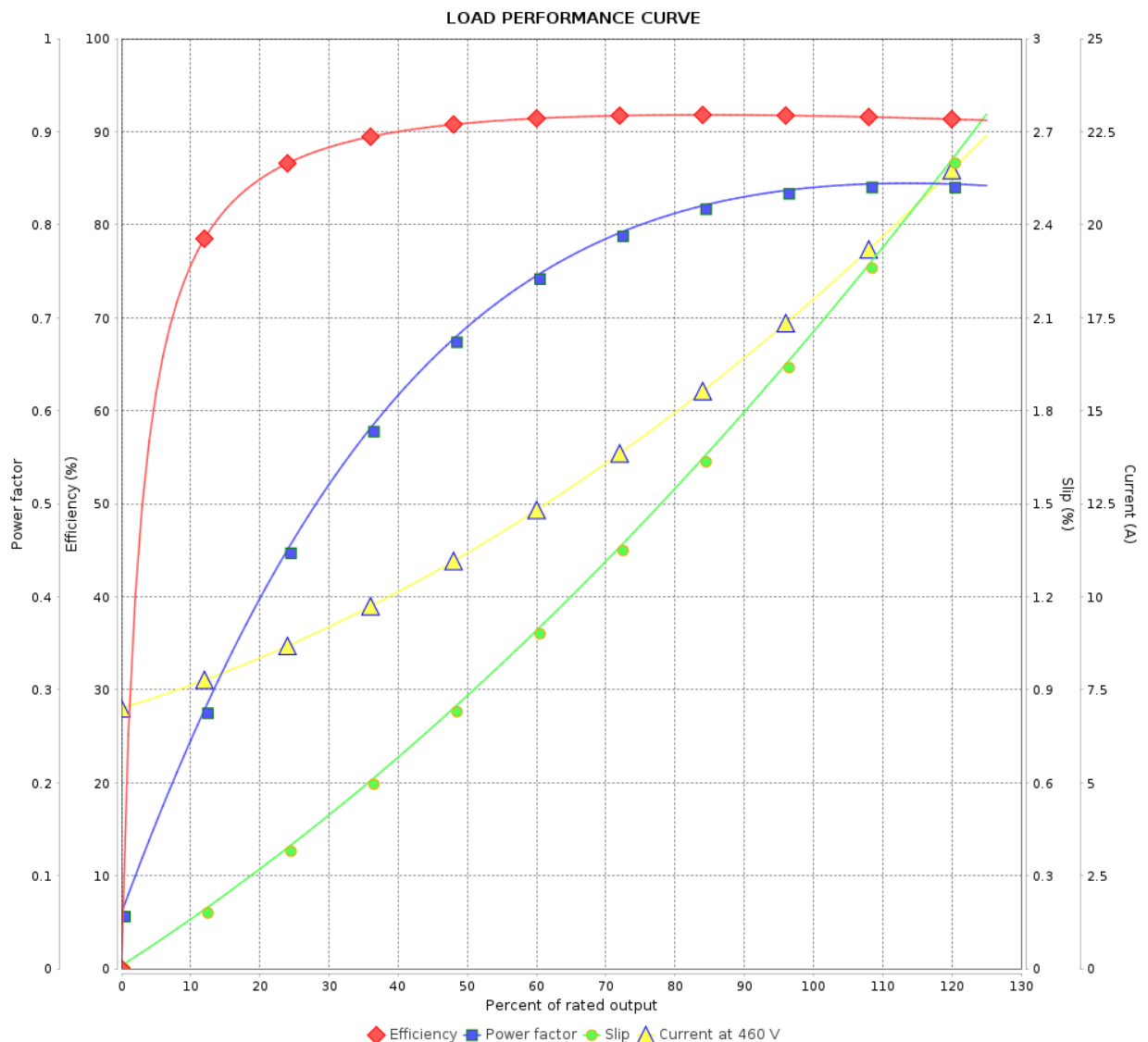


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THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



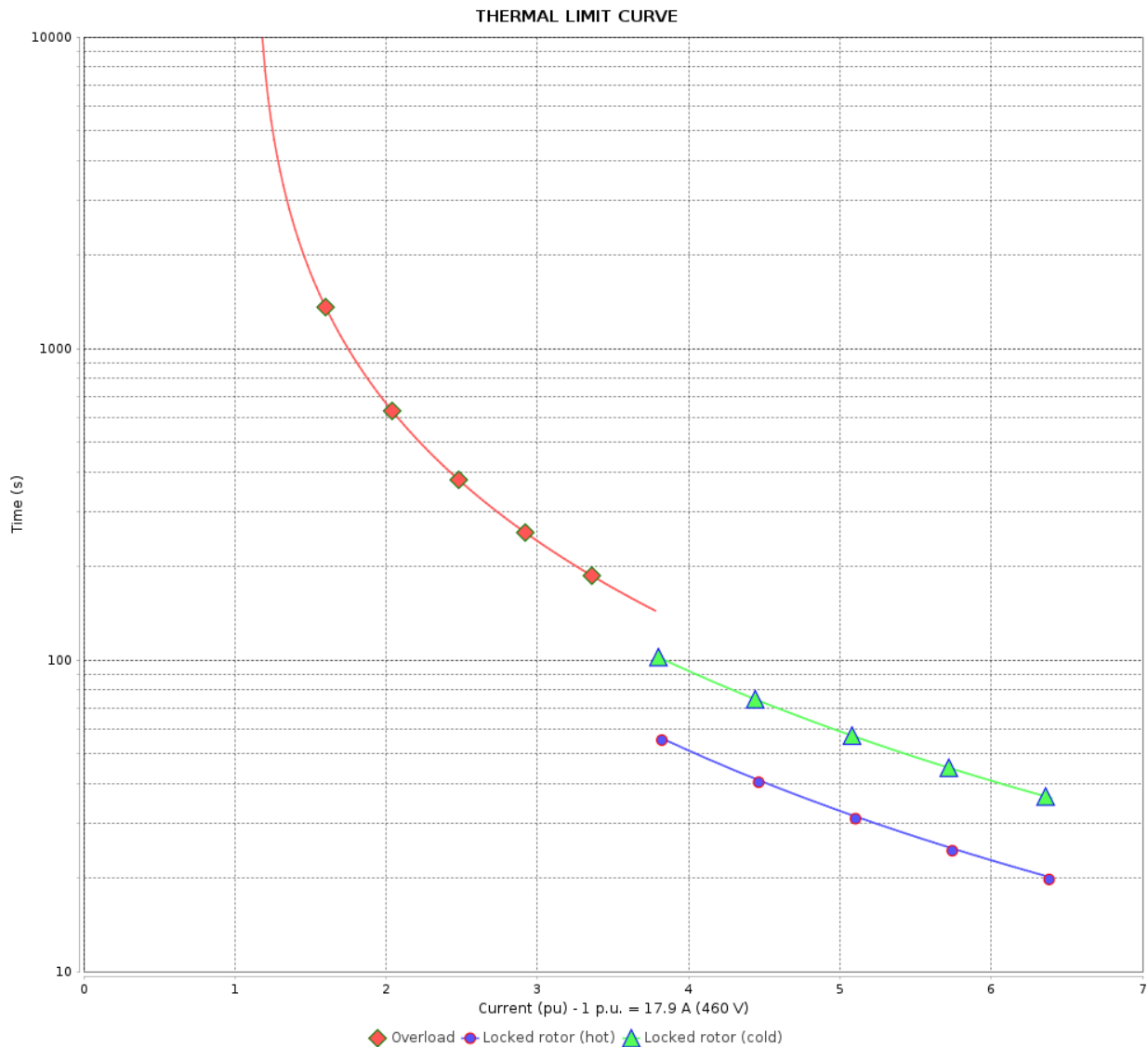
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		Catalog # : 01512ST3QIE284TC-W22		
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LRC : 6.4		Duty cycle : Cont.(S1)		
Rated torque : 67.0 ft.lb		Insulation class : F		
Locked rotor torque : 229 %		Service factor : 1.25		
Breakdown torque : 260 %		Temperature rise : 80 K		
Rated speed : 1175 rpm		Design : B		
Heating constant				
Cooling constant				
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THERMAL LIMIT CURVE

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VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

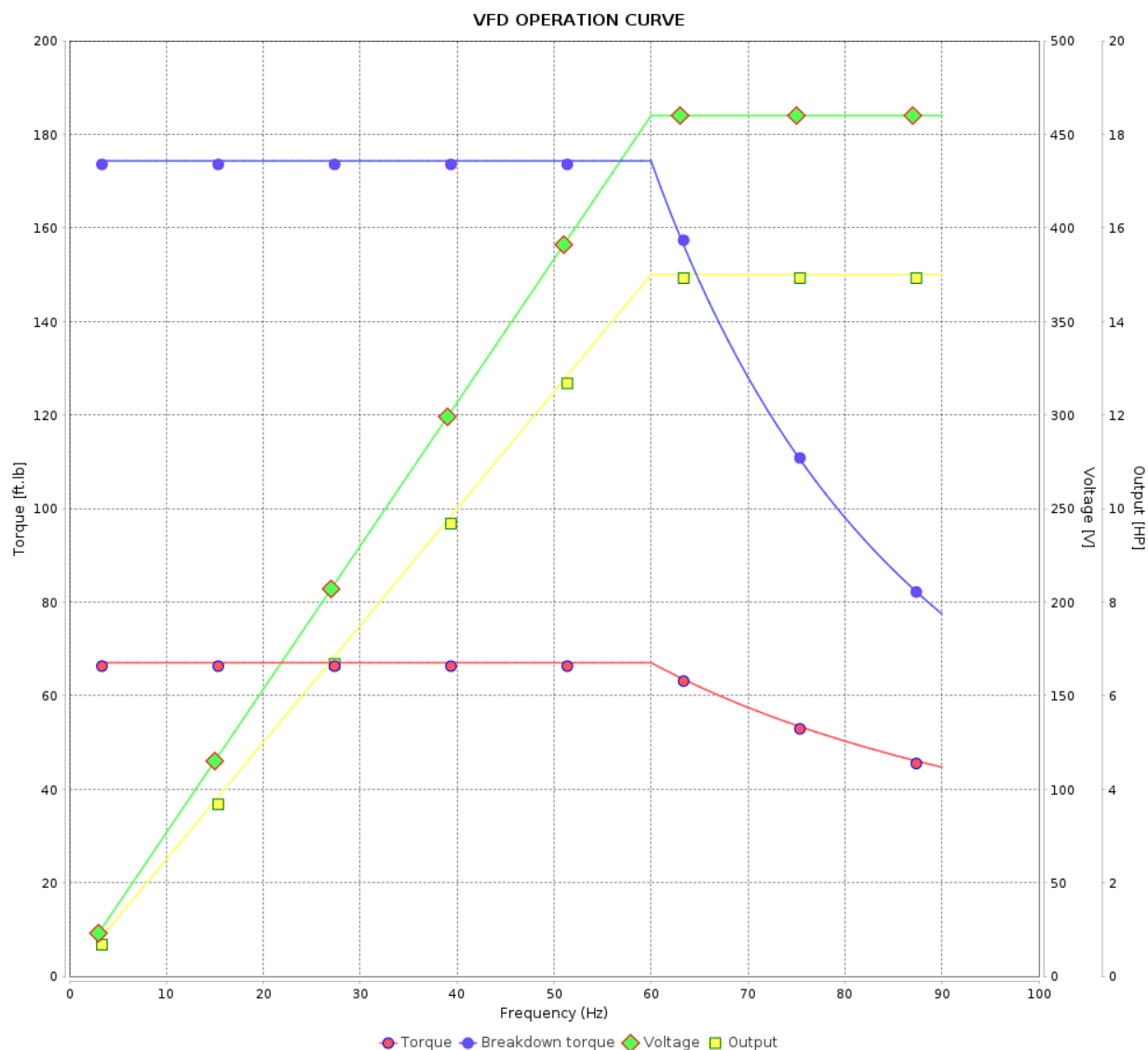


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Performance : 460 V 60 Hz 6P

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LRC : 6.4
Rated torque : 67.0 ft.lb
Locked rotor torque : 229 %
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Rated speed : 1175 rpm

Moment of inertia (J) : 7.85 sq.ft.lb
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