

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 13249041
Catalog # : 07518ET3E365TC-W22G

Frame	: 364/5TC	Locked rotor time	: 25s (cold) 14s (hot)
Output	: 75 HP (55 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 174/87.2 A	Protection degree	: IP55
L. R. Amperes	: 1116/558 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 66.0/33.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1780 rpm	Noise level ²	: 67.0 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 221 ft.lb	Approx. weight ³	: 965 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 23.3 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	94.0	94.5	95.0	95.4	Max. traction	: 1704 lb
Power Factor	0.44	0.68	0.78	0.83	Max. compression	: 2669 lb

		Drive end	Non drive end
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	12000 h	12000 h
Lubricant amount	:	27 g	27 g
Lubricant type	:	Mobil Polyrex EM	

Notes
USABLE @208V 186A SF 1.10 SFA 205A

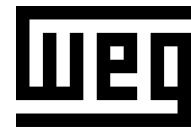
This revision replaces and cancel the previous one, which must be eliminated.
(1) Looking the motor from the shaft end.
(2) Measured at 1m and with tolerance of +3dB(A).
(3) Approximate weight subject to changes after manufacturing process.
(4) At 100% of full load.

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

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

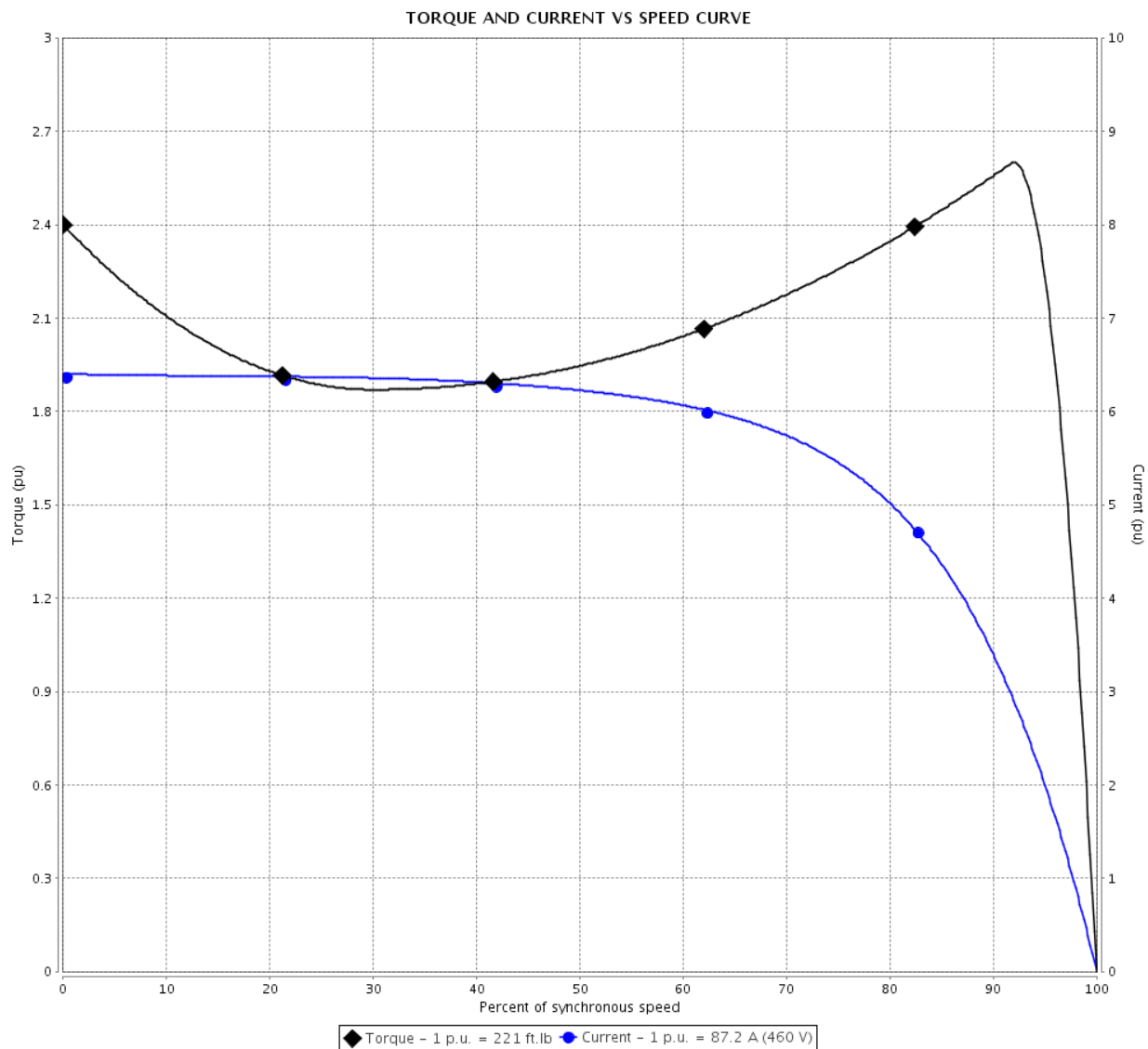


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13249041

Catalog # : 07518ET3E365TC-W22G



Performance : 230/460 V 60 Hz 4P

Rated current	: 174/87.2 A	Moment of inertia (J)	: 23.3 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 221 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1780 rpm	Design	: B

Locked rotor time : 25s (cold) 14s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		<div style="display: flex; justify-content: space-between;"> <div>Page 2 / 6</div> <div>Revision</div> </div>		
Checked by				
Date	10/04/2020			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

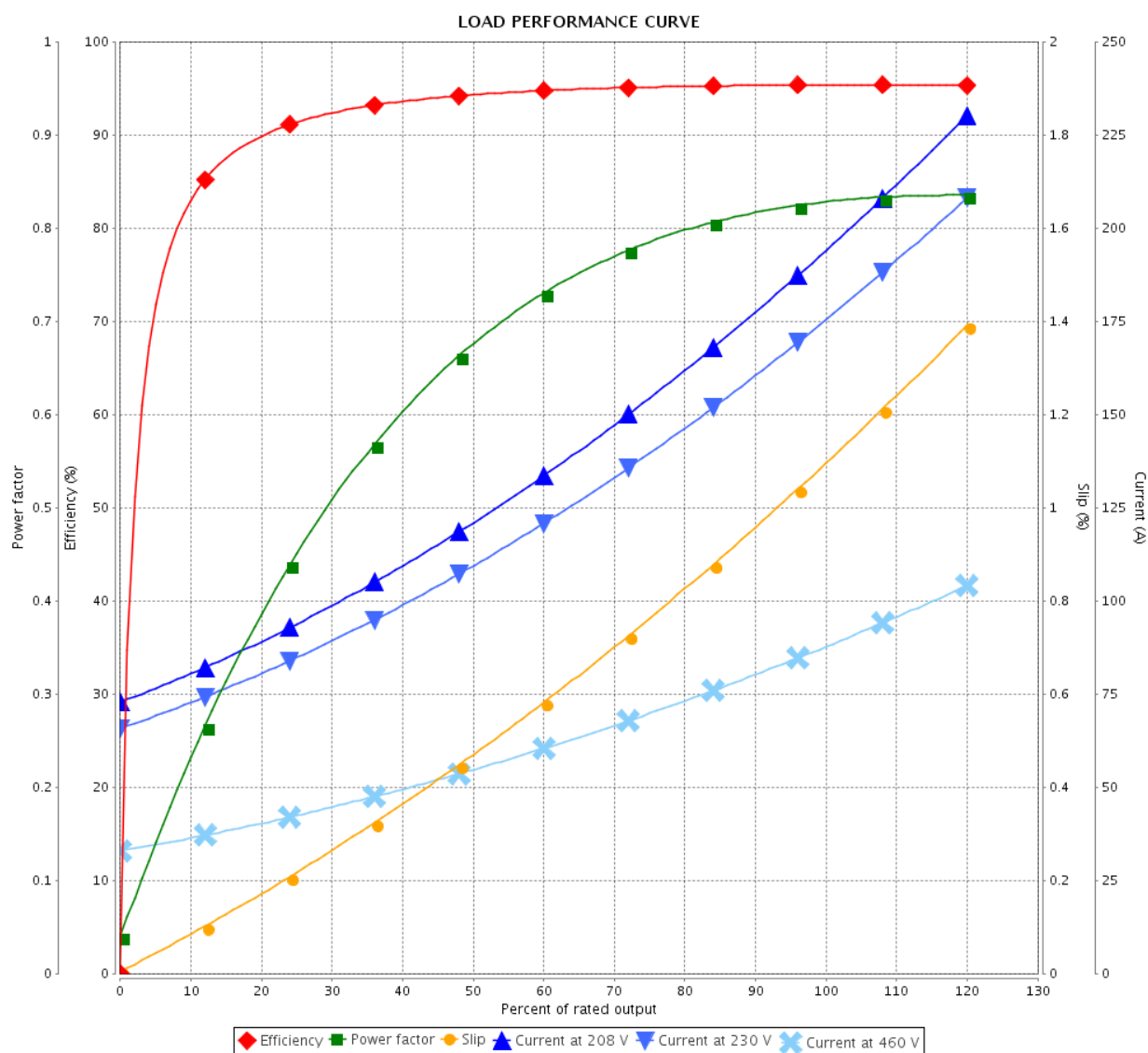


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13249041

Catalog # : 07518ET3E365TC-W22G



Performance : 230/460 V 60 Hz 4P

Rated current : 174/87.2 A
LRC : 6.4
Rated torque : 221 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 1780 rpm

Moment of inertia (J) : 23.3 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 6Revision		
Checked by				
Date	10/04/2020			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer

:

Product line

: W22 NEMA Premium Efficiency
Three-Phase

Product code :

13249041

Catalog # :

07518ET3E365TC-W22G

Performance : 230/460 V 60 Hz 4P

Rated current : 174/87.2 A

LRC : 6.4

Rated torque : 221 ft.lb

Locked rotor torque : 240 %

Breakdown torque : 260 %

Rated speed : 1780 rpm

Moment of inertia (J) : 23.3 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.

Changes Summary

Performed

Checked

Date

Performed by

Checked by

Date

10/04/2020

Page

4 / 6

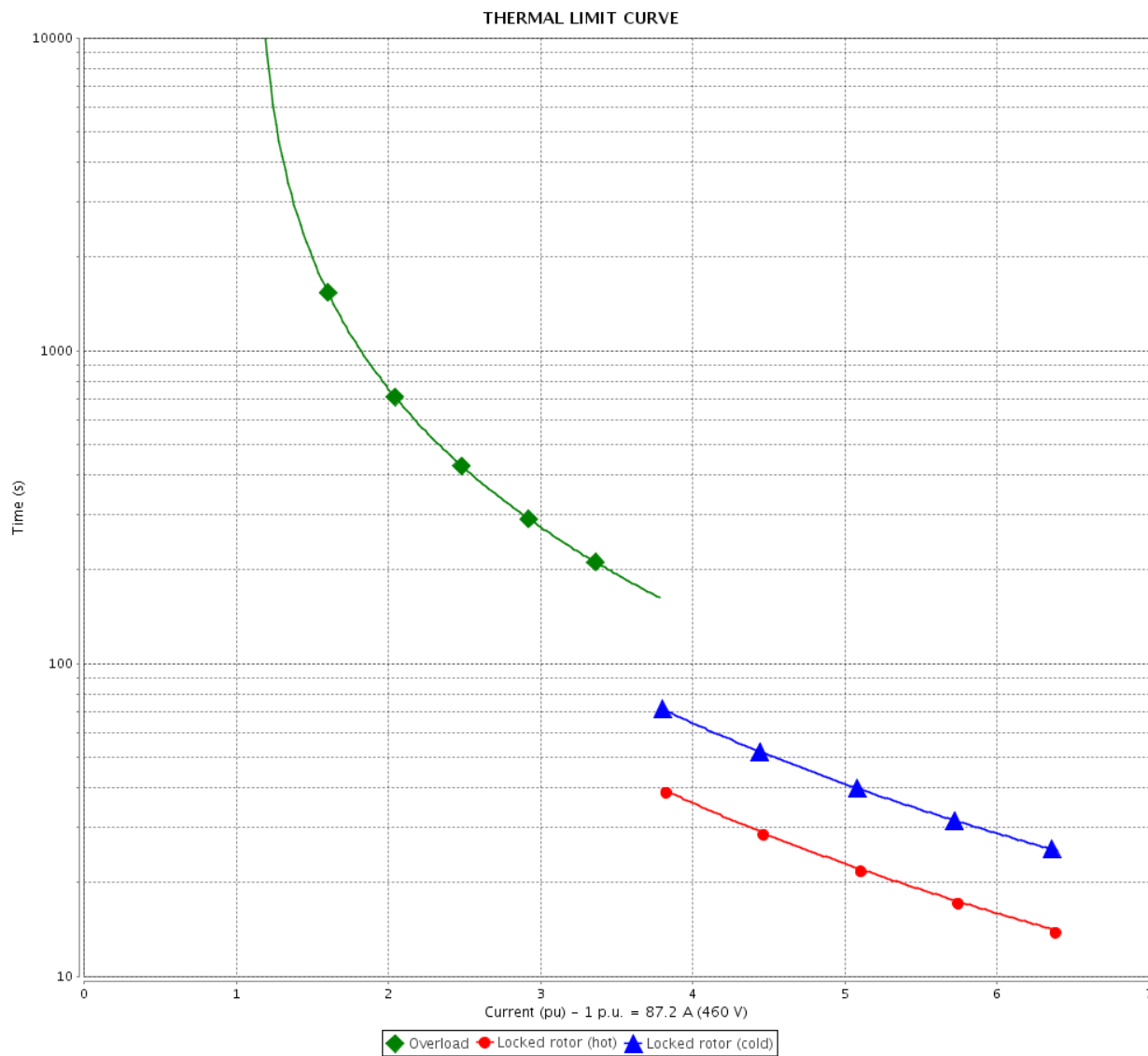
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



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

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

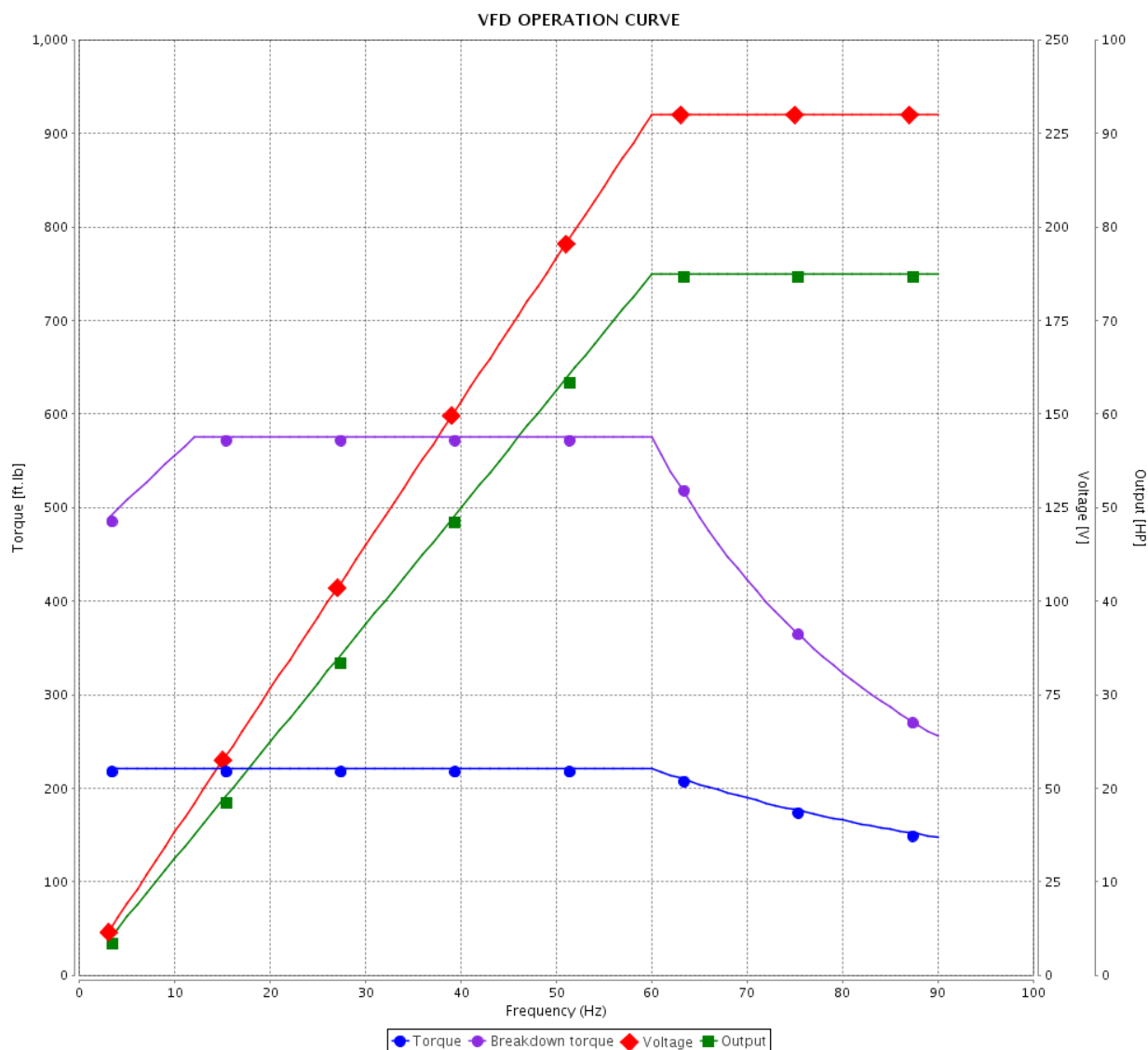


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 13249041

Catalog # : 07518ET3E365TC-W22G



Performance : 230/460 V 60 Hz 4P

Rated current : 174/87.2 A
LRC : 6.4
Rated torque : 221 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 260 %
Rated speed : 1780 rpm

Moment of inertia (J) : 23.3 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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

