

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W22Xec Medium Voltage Three-Phase		Product code : 13298587	
				Catalog # : 20012ET3XL449-W22MV	
Frame : L447/9T Output : 200 HP (150 kW) Poles : 6 Frequency : 60 Hz Rated voltage : 2300 V Rated current : 51.6 A L. R. Amperes : 310 A LRC : 6.0x(Code G) No load current : 24.3 A Rated speed : 1185 rpm Slip : 1.25 % Rated torque : 886 ft.lb Locked rotor torque : 150 % Breakdown torque : 210 % Insulation class : F Service factor : 1.00 Design : A			Locked rotor time : 25s (cold) 14s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 71.0 dB(A) Starting method : VFD Approx. weight <sup>3</sup> : 2975 lb		
Output	25%	50%	75%	100%	Foundation loads
Efficiency (%)	92.6	92.8	93.6	93.6	Max. traction : 3870 lb
Power Factor	0.37	0.63	0.73	0.78	Max. compression : 6844 lb
		<u>Drive end</u>		<u>Non drive end</u>	
Bearing type	:	6322 C3		6319 C3	
Sealing	:	Inpro/Seal		Inpro/Seal	
Lubrication interval	:	11000 h		13000 h	
Lubricant amount	:	60 g		45 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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### Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	PT100 - 3 wires	2 x Phase	-
2	DE bearing	PT100 - 3 wires	1 x Bearing	-
3	NDE bearing	PT100 - 3 wires	1 x Bearing	-

### Space heater information

Voltage: 110 - 127 V

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# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage

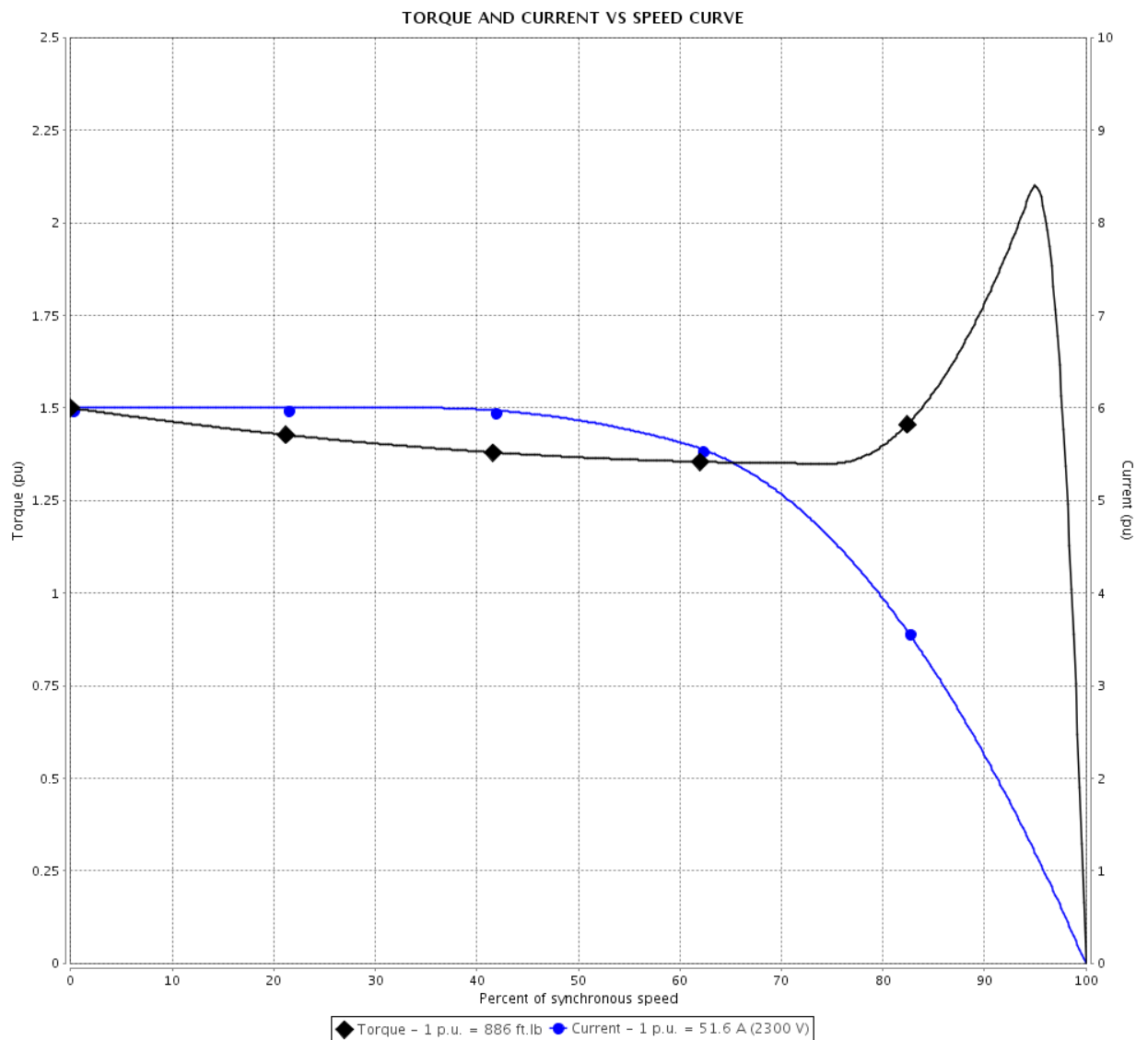


Customer :

Product line : W22Xec Medium Voltage Three-Phase

Product code : 13298587

Catalog # : 20012ET3XL449-W22MV



Performance : 2300 V 60 Hz 6P

Rated current	: 51.6 A	Moment of inertia (J)	
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 886 ft.lb	Insulation class	: F
Locked rotor torque	: 150 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 80 K
Rated speed	: 1185 rpm	Design	: A

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

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		Revision		

# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line

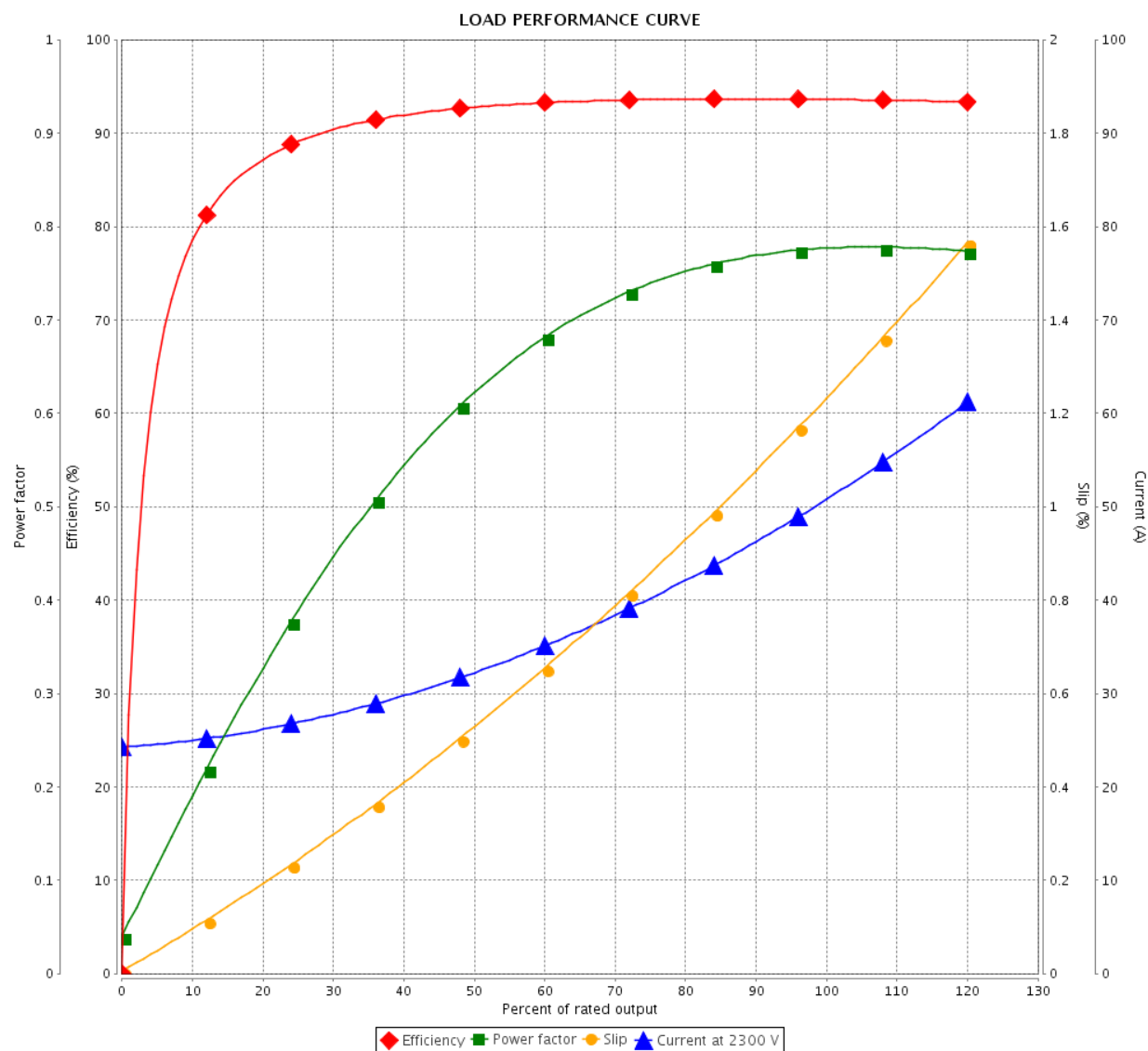
: W22Xec Medium Voltage Three-Phase

Product code :

13298587

Catalog # :

20012ET3XL449-W22MV



Performance : 2300 V 60 Hz 6P

Rated current : 51.6 A  
 LRC : 6.0  
 Rated torque : 886 ft.lb  
 Locked rotor torque : 150 %  
 Breakdown torque : 210 %  
 Rated speed : 1185 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : A

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# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec Medium Voltage Three-Phase

Product code : 13298587

Catalog # : 20012ET3XL449-W22MV

Performance : 2300 V 60 Hz 6P

Rated current : 51.6 A  
LRC : 6.0  
Rated torque : 886 ft.lb  
Locked rotor torque : 150 %  
Breakdown torque : 210 %  
Rated speed : 1185 rpm

Moment of inertia (J)  
Duty cycle : Cont.(S1)  
Insulation class : F  
Service factor : 1.00  
Temperature rise : 80 K  
Design : A

Heating constant

Cooling constant

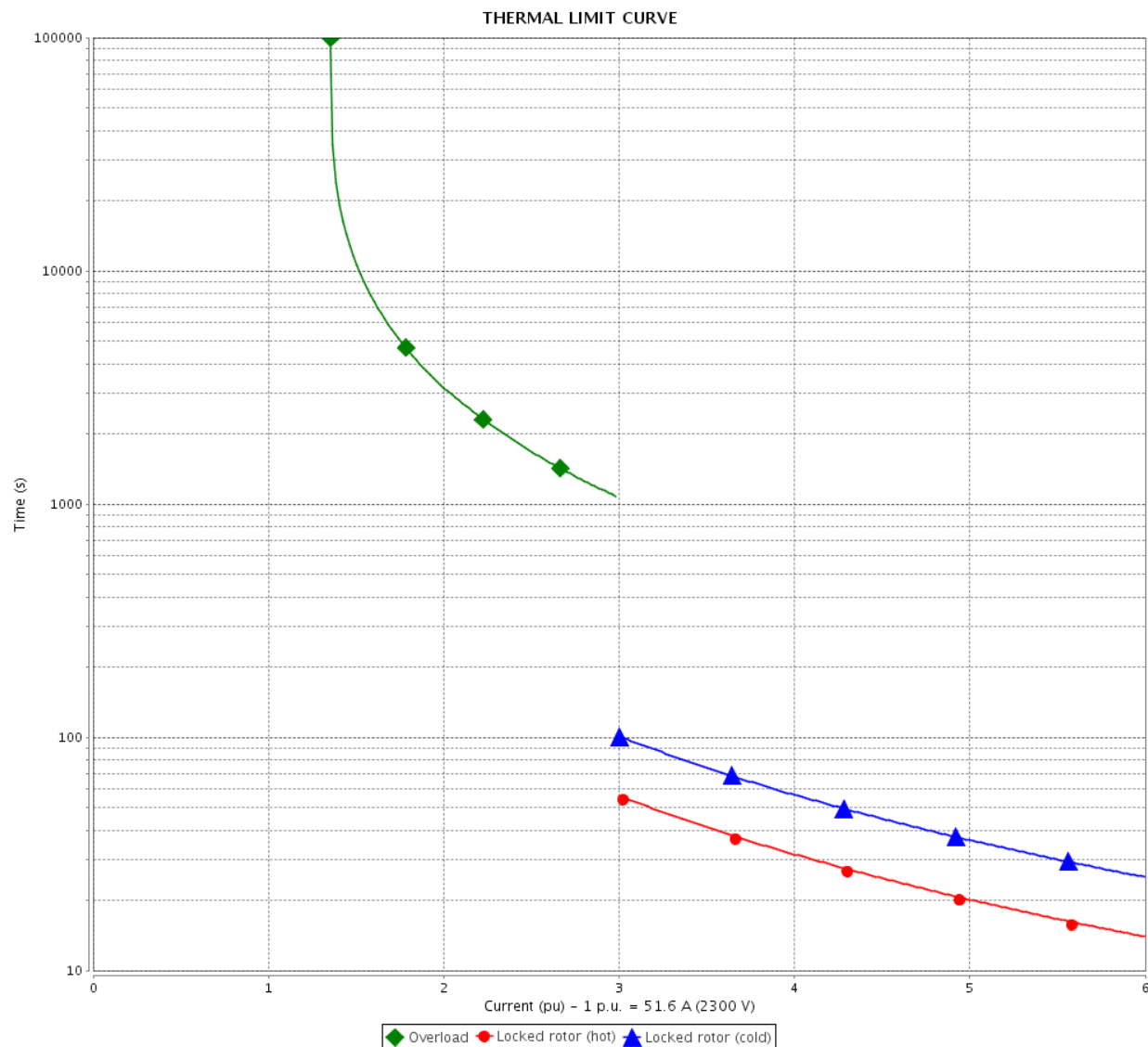
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :



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1 2 3 4 5 6 7 8 9 10

EIXO/SHAFT

PADRÃO/STANDARD

OPCIONAL/OPTIONAL

ESPECIAL/SPECIAL

Dimensões em polegadas

Dimensions in inches

X

18.110

28.740

NPT 3"

Grounding for leads 35–70mm<sup>2</sup>

25.866

28.543

14.291

21.024

2.125

3.937

0.810

18.000

21.929

0.689

28.236

11.000

11.283

1.630

Grounding for leads 25–185mm<sup>2</sup>

Additional terminal box for accessories  
NPT 3/4"

Terminal box for space heater  
NPT 3/4"

SPM studs

28.456

11.500

30.906

23.874

11.693

20.000

25.000

31.535

57.181

2.638

7.5

8.500

SPM studs

Center Hole  
DUNC 3/4"–10 WEG TBG12  
(DIN 332)

7.087

Ø17

24

M8x1.25

Vibration sensor studs detail

0.875

0.875

2.880

3.3750

3.3740

DE Shaft End

Resistência de aquecimento 110 a 127 V / Space heaters 110 to 127 V

Apto a sensor de vibração SPM / SPM studs

Graxeira prolongada / Extended grease fitting

Proteção térmica nos mancais – PT100 (1 por mancal 3 fios) / PT100 on bearings (1 per bearing – with 3 wires)

Proteção térmica PT100 (2 por fase/3 fios) / PT100 2 per phase 3 wires for windings

Motor com características IEEE841 / Motor with IEEE841 features

Dreno Roscado Tipo "T" / Type "T" threaded drain plug

Ventilador externo com pintura epoxi / External fan coated with epoxy coating

Aplicar óleo protetivo Tiroil nos encaixes das tampas / Apply tiroil oil on endshields fittings

Rolamento traseiro C3 / C3 NDE bearing

Terminal de aterramento adicional na carcaça (simetricamente oposto) em bronze

Additional bronze grounding connector on frame (symmetrically opposite)

Planicidade especial dos pés conforme IEEE841/API 541

Special feet flatness according to IEEE841/API 541

Bobinas seladas (2x VPI + Pulver) / Sealed windings (2x VPI + Pulver)

Balanceamento reduzido ½ chaveta / Reduced balancing with half key

Pintura interna tropicalizada conforme IEEE841 / Tropicalized internal painting according to IEEE841

Epoxi na passagem dos cabos / Epoxy in the leads outlet

Carcaça com furação para pinos guia / Frame with holes on foot for dowel pins

Saída de graxa conforme IEEE841 / Grease outlet according to IEEE841

Vedação – INPRO/SEAL / Sealing – INPRO/SEAL

Ventilador de Alumínio / Aluminum fan

Pintar interior da caixa de ligação com cor Munsell 2.5 YR 6/14

Finish color Munsell 2.5 YR 6/14 inside of terminal box

Categoria A / Design A

Tampa traseira com mancal eletricamente isolado

NDE endshield with electrically insulated bearing hub

Defletor de ar dianteiro / Drive-End Air Deflector

Plano de pintura 203A / Painting plan 203A

Forma construtiva NEMA F-1 / Mounting NEMA F-1

Forma construtiva B3D / Mounting B3R(D)

WEG ELECTRIC CORPORATION – WEC

500001619525

ALT. CONFORME CLAIM 415525398

SCATOLIN

ALISSON

ALISSON

05.09.2019

05

500001594952

ALTERADO CONF. CLAIM 415204042

RICLAV

DALTONR

DALTONR

24.05.2019

04

ECM

LOC

LOC

RESUMO MODIFICAÇÃO

EXECUTADO

VERIFICADO

LIBERADO

DATA

VER

EXEC. /EXECUTED

DVEGINI

THREE-PHASE W22Xec MOTOR

10003200275

VERIF. /CHECKED

CVITORINO

VER

000

05

LIBER./RELEASED

CVITORINO

VER

000

05

DATA LB /REL DT

07.11.2014

WMO

JARAGUA DO SUL

ENGENHARIA DE PRODUTO

FOLHA/SHEET

1 / 1

200 HP

06 Poles

60Hz

413625303/0

ELET/MEC

A