

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 14056629
Catalog # : DT030504NPW22

Frame	: 284/6TD	Locked rotor time	: 36s (cold) 20s (hot)
Output	: 30 HP (22 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	: 28.1 A	Protection degree	: IP55
L. R. Amperes	: 171 A	Cooling method	: IC411 - TEFC
LRC	: 6.1x(Code G)	Mounting	: F-1
No load current	: 9.84 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1770 rpm	Noise level ²	: 63.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 89.0 ft.lb	Approx. weight ³	: 437 lb
Locked rotor torque	: 240 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 5.85 sq.ft.lb		
Design	: B		

Output	25%	50%	75%	100%	Foundation loads	
Efficiency (%)	0.000	93.0	93.0	93.6	Max. traction	: 705 lb
Power Factor	0.00	0.70	0.80	0.84	Max. compression	: 1158 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)
6.8	5.8	5.2	3.1	2.2	1.4	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	V'Ring	V'Ring
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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page Revision 1 / 6		
Checked by				
Date	30/07/2026			

TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage

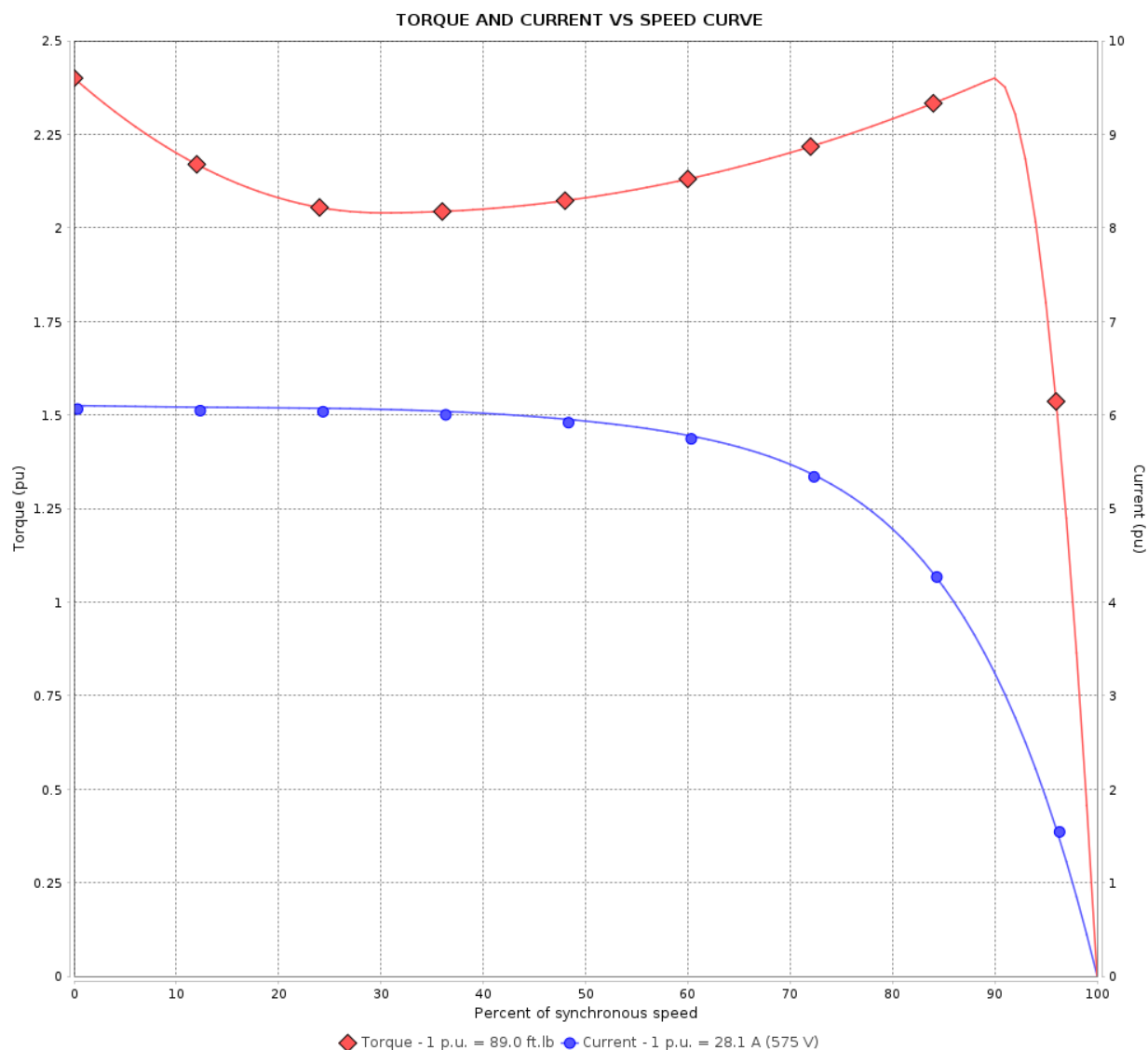


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 14056629

Catalog # : DT030504NPW22



Performance : 575 V 60 Hz 4P

Rated current	: 28.1 A	Moment of inertia (J)	: 5.85 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 89.0 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

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

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 2 / 6Revision		
Checked by				
Date	30/07/2026			

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

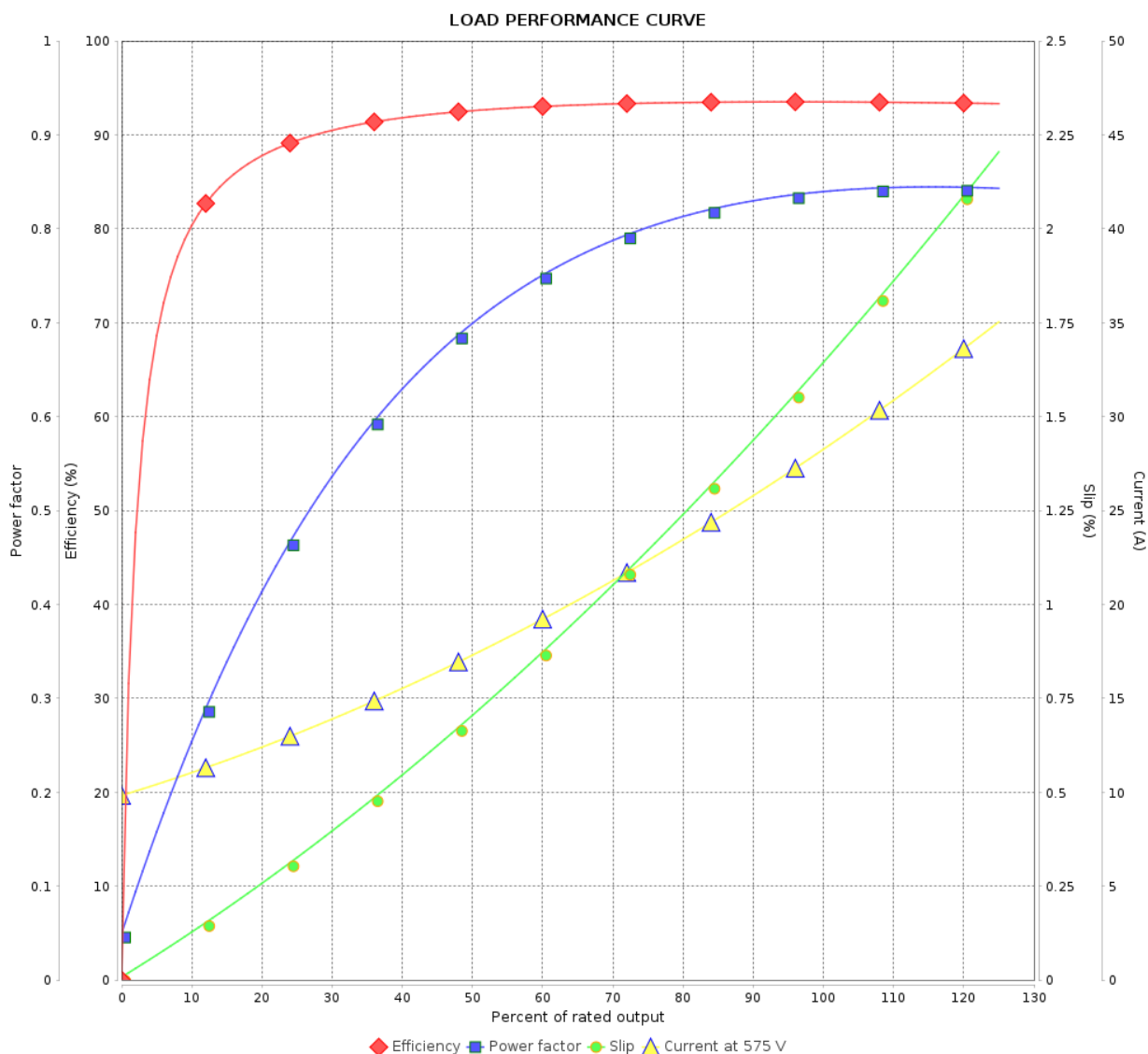


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 14056629

Catalog # : DT030504NPW22



Performance : 575 V 60 Hz 4P

Rated current : 28.1 A
LRC : 6.1
Rated torque : 89.0 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 240 %
Rated speed : 1770 rpm

Moment of inertia (J) : 5.85 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	30/07/2026			

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 14056629

Catalog # : DT030504NPW22

Performance : 575 V 60 Hz 4P

Rated current	: 28.1 A	Moment of inertia (J)	: 5.85 sq.ft.lb
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 89.0 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Heating constant

Cooling constant

Rev.

Changes Summary

Performed

Checked

Date

Performed by

Checked by

Date

30/07/2026

Page

4 / 6

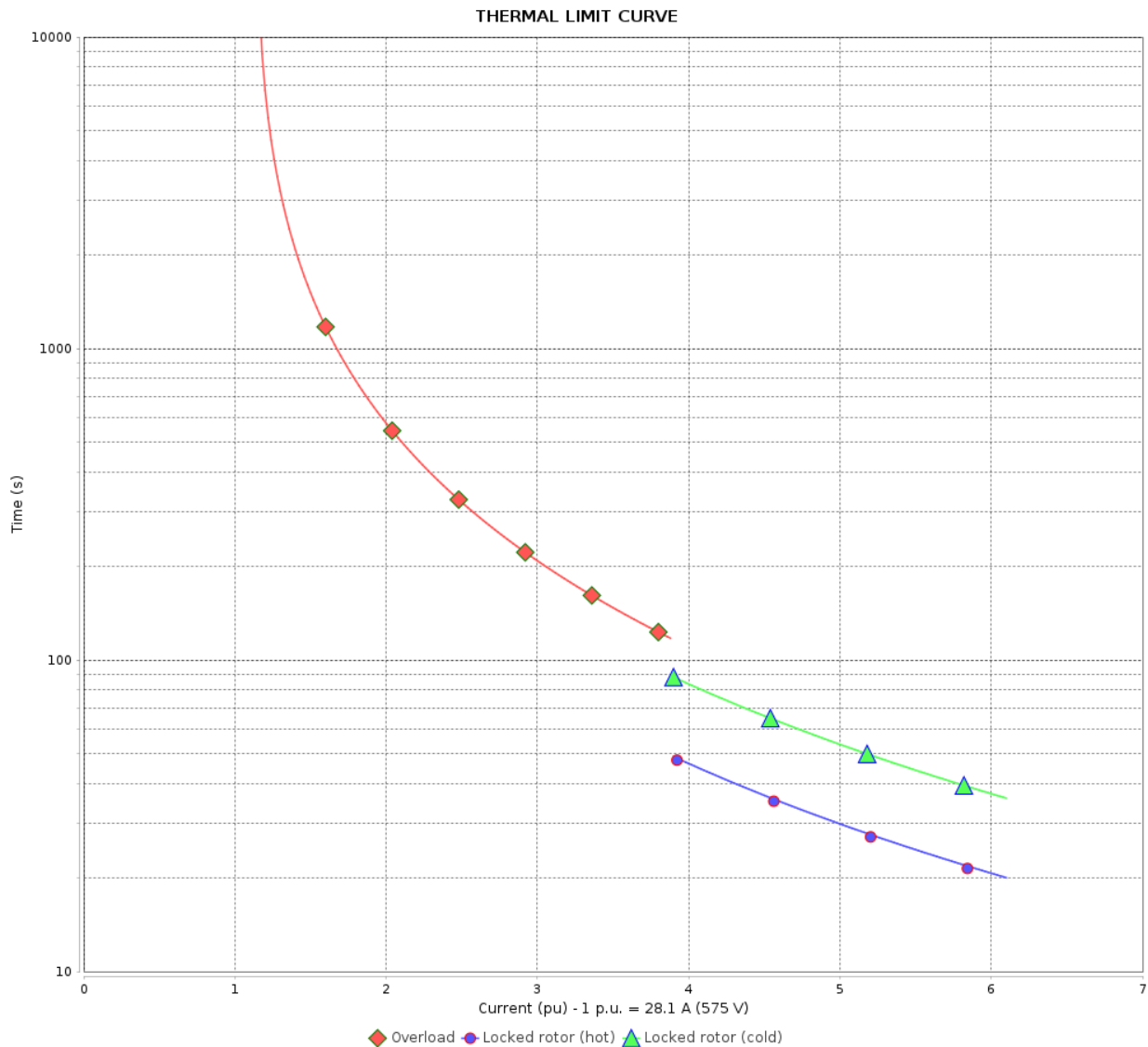
Revision

THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : _____



Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				5 / 6	
Date	30/07/2026				

VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage

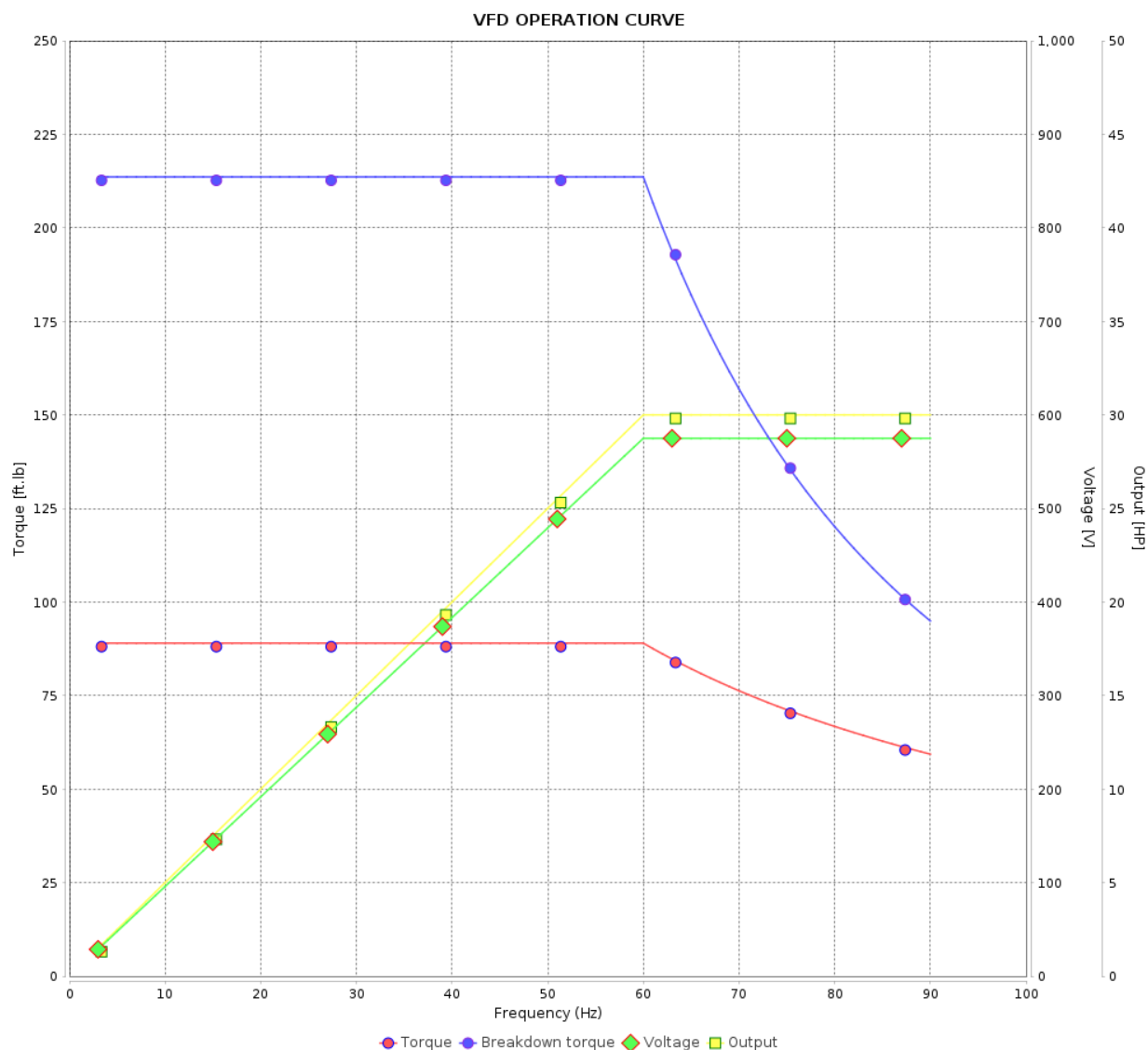


Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 14056629

Catalog # : DT030504NPW22



Performance : 575 V 60 Hz 4P

Rated current : 28.1 A
LRC : 6.1
Rated torque : 89.0 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 240 %
Rated speed : 1770 rpm

Moment of inertia (J) : 5.85 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	Revision
Checked by				6 / 6	
Date					

