

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase Product code : 12974983

Frame	: 404/5T	Locked rotor time	: 30s (cold) 17s (hot)
Output	: 75 HP (55 kW)	Temperature rise	: 80 K
Poles	: 6	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	: 67.9 A	Protection degree	: IP55
L. R. Amperes	: 435 A	Cooling method	: IC411 - TEFC
LRC	: 6.4x(Code G)	Mounting	: F-1
No load current	: 24.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1184 rpm	Noise level ²	: 68.0 dB(A)
Slip	: 1.33 %	Starting method	: Direct On Line
Rated torque	: 333 ft.lb	Approx. weight ³	: 1089 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 40.2 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	94.1	94.5	94.5	Max. traction	: 1713 lb
Power Factor	0.74	0.83	0.86	Max. compression	: 2880 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)
6.3	5.0	4.5	3.5	2.3	1.7	1.1

	Drive end	Non drive end
Bearing type	: 6316 C3	6314 C3
Sealing	: WSeal	WSeal
Lubrication interval	: 16000 h	17000 h
Lubricant amount	: 34 g	27 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				
Checked by				
Date	17/07/2026		Page 1 / 5	Revision

TORQUE AND CURRENT VS SPEED CURVE

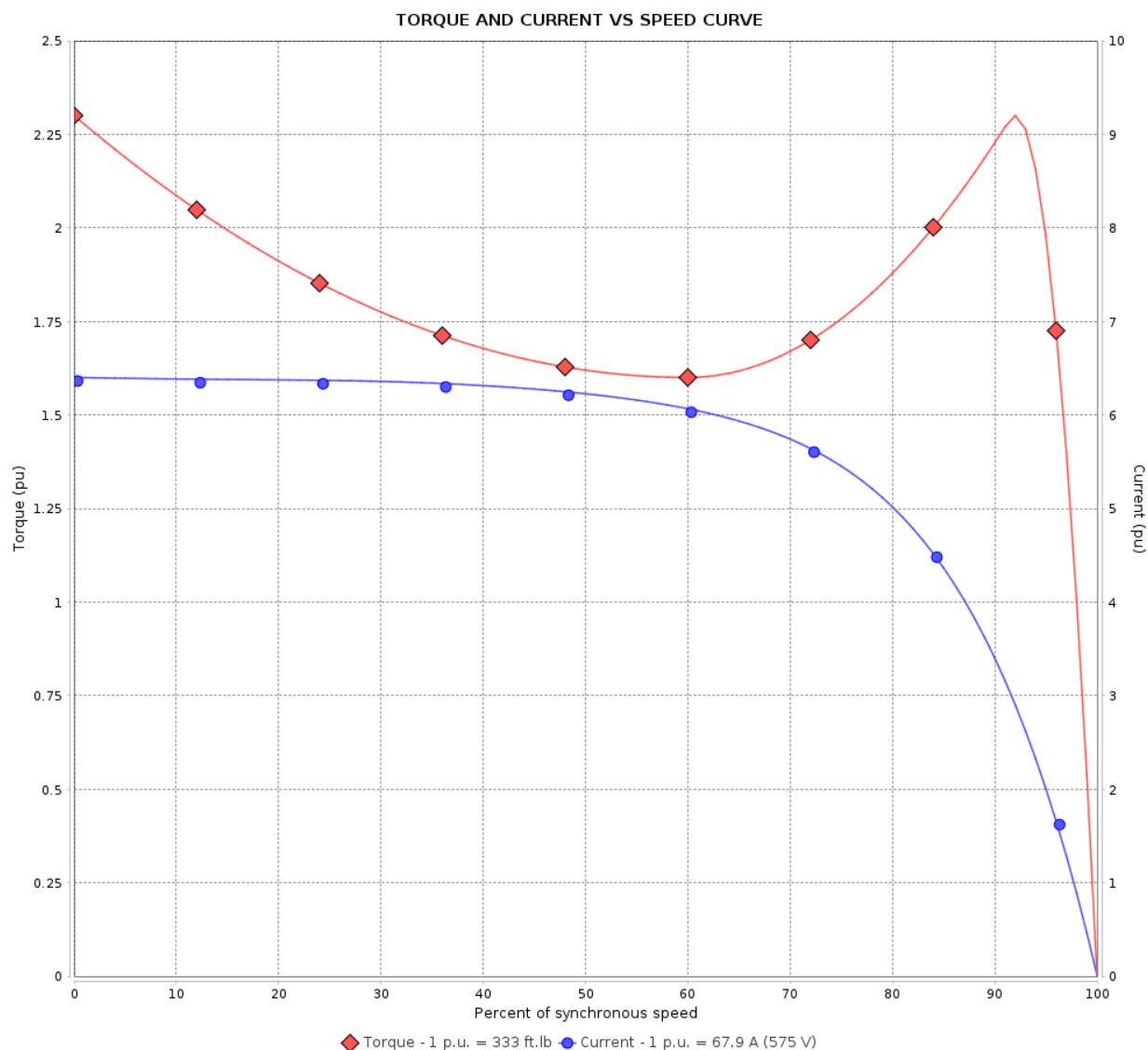
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12974983



Performance : 575 V 60 Hz 6P

Rated current	: 67.9 A	Moment of inertia (J)	: 40.2 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 333 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1184 rpm	Design	: B

Locked rotor time : 30s (cold) 17s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 2 / 5 Revision		
Checked by				
Date	17/07/2026			

LOAD PERFORMANCE CURVE

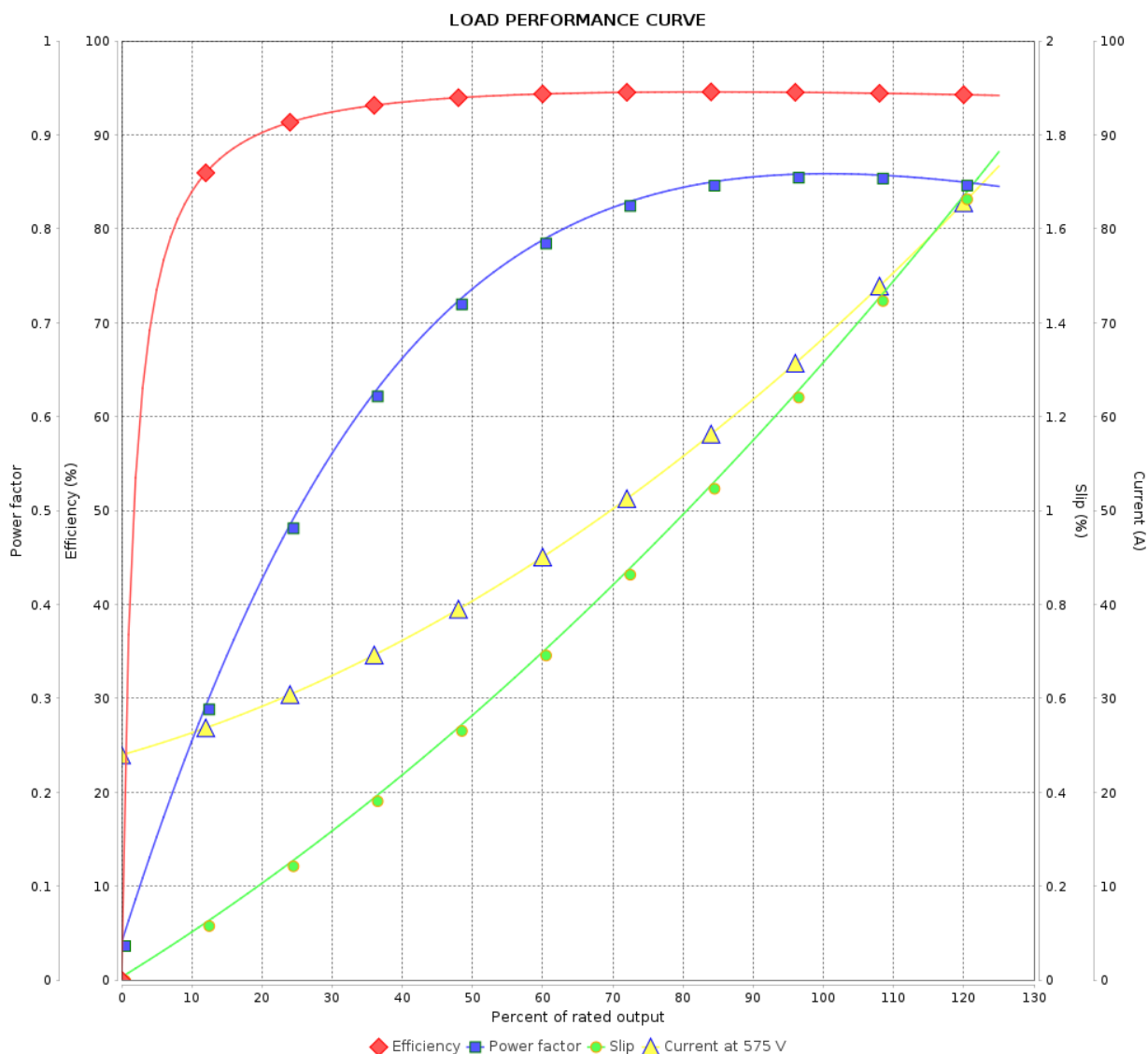
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12974983



Performance : 575 V 60 Hz 6P

Rated current : 67.9 A
LRC : 6.4
Rated torque : 333 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 229 %
Rated speed : 1184 rpm

Moment of inertia (J) : 40.2 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				
Checked by				
Date	17/07/2026		Page 3 / 5	Revision

THERMAL LIMIT CURVE

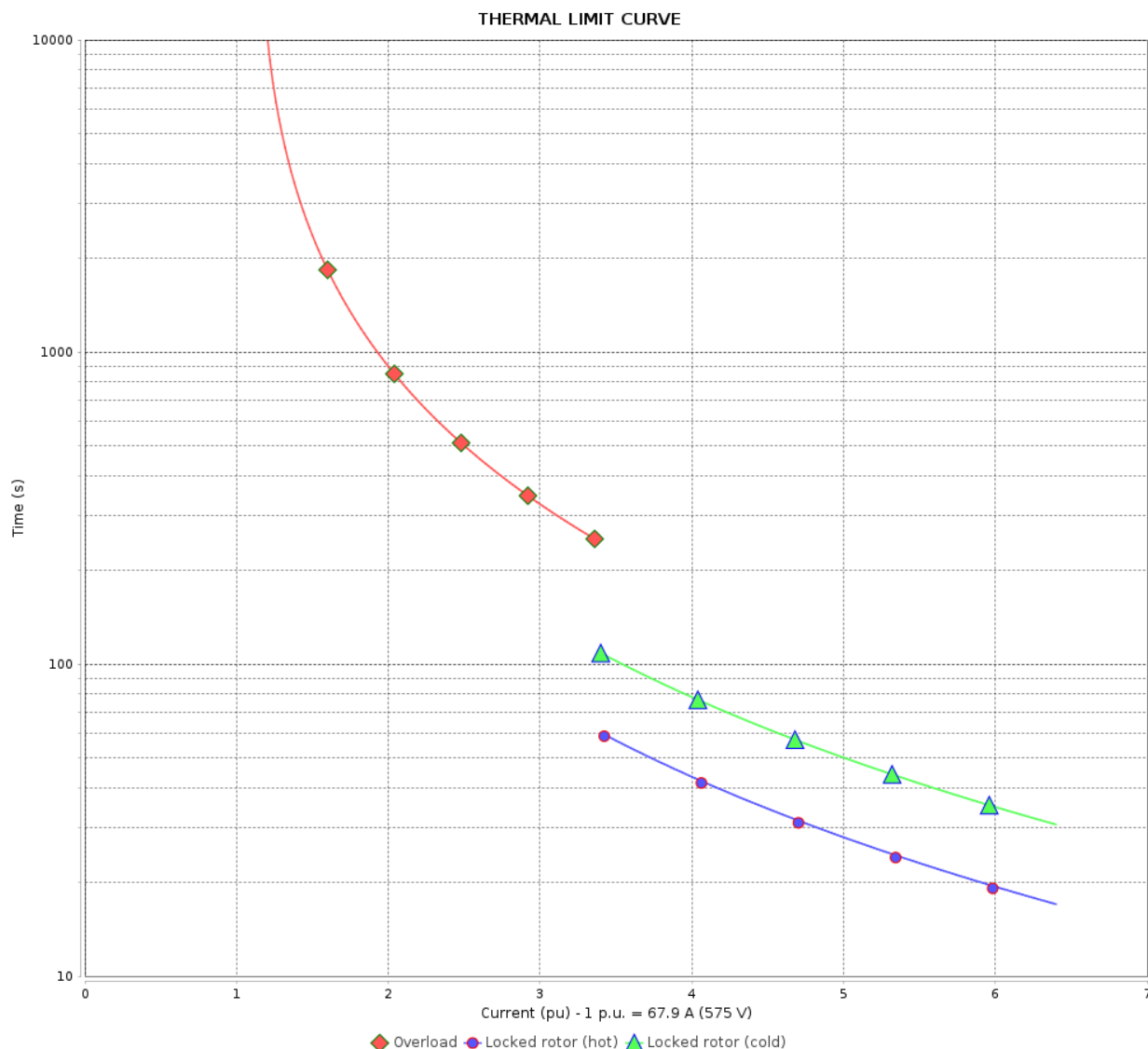
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12974983



Performance : 575 V 60 Hz 6P

Rated current	: 67.9 A	Moment of inertia (J)	: 40.2 sq.ft.lb
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 333 ft.lb	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 229 %	Temperature rise	: 80 K
Rated speed	: 1184 rpm	Design	: B

Heating constant

Cooling constant

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				4 / 5	
Date	17/07/2026				

VFD OPERATION CURVE

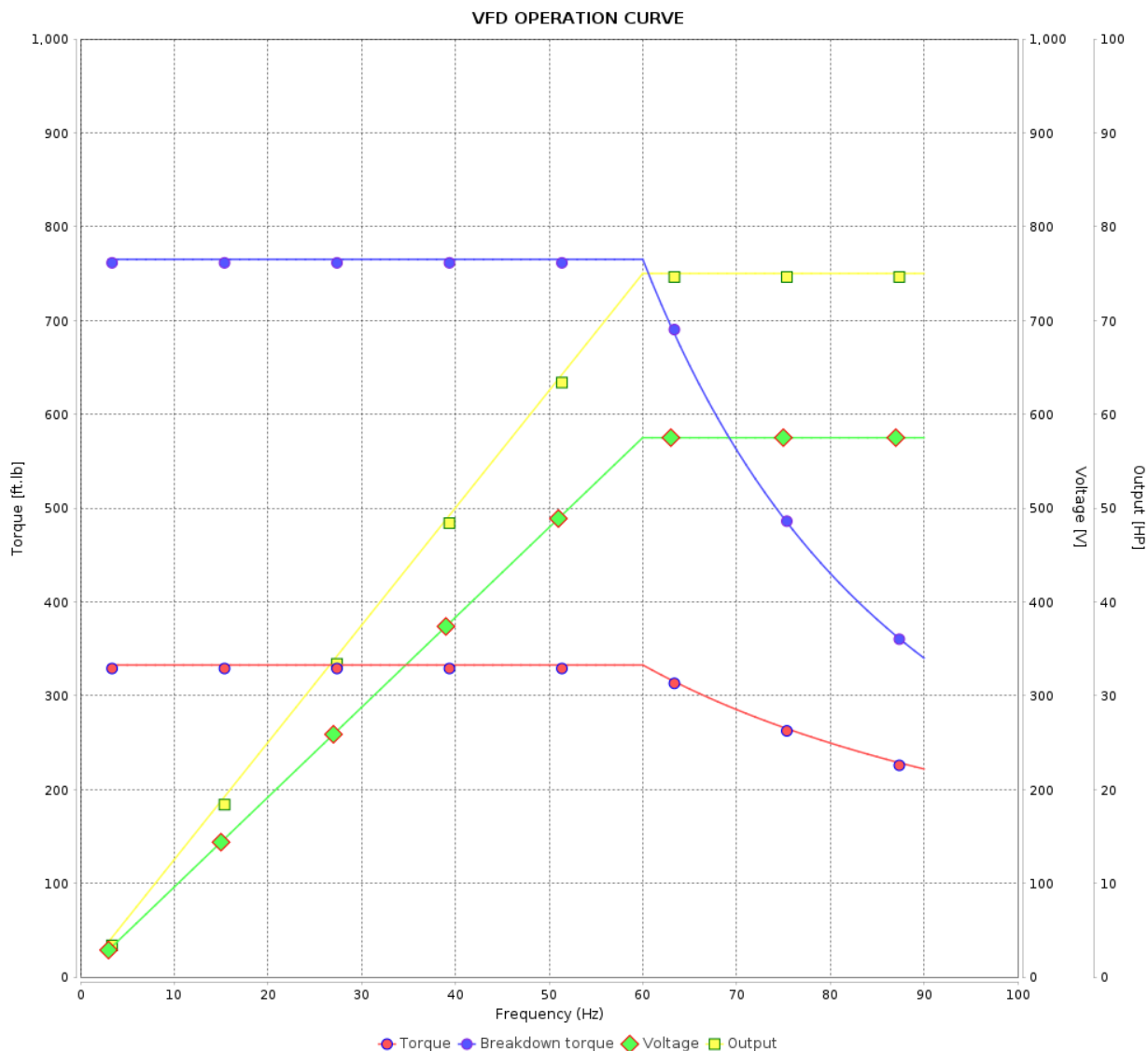
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency
Three-Phase

Product code : 12974983



Performance : 575 V 60 Hz 6P

Rated current : 67.9 A
LRC : 6.4
Rated torque : 333 ft.lb
Locked rotor torque : 229 %
Breakdown torque : 229 %
Rated speed : 1184 rpm

Moment of inertia (J) : 40.2 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 5 / 5 Revision		
Checked by				
Date	17/07/2026			

