DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:
Product line	: W22 - Nema Premium Efficiency

Frame	: 324/6TSC	Locked rotor time	: 20 s (hot) 36 s (cold)
Output	: 50 HP (37 kW)	Temperature rise[4]	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 60 Hz	Ambient temperature	: -20 °C to +40 °C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l
Rated current	: 45.9 A	Protection degree	: IP55
L. R. Amperes	: 289 A	Cooling method	: IC411 - TEFC
LRC	: 6.3 Code G	Mounting	: B34R(D)
No load current	: 12.7 A	Rotation[1]	: Both
Rated speed	: 3560 rpm	Noise level[2]	: 76 dB(A)
Slip	: 1.11 %	Starting method	: Direct On Line
Rated torque	: 10.2 kgfm	Approx. weight[3]	: 265 kg
Locked rotor torque	: 240 %	Design	: B
Pull up torque	: 165 %		
Breakdown torque	: 240 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.2422 kgm²		

Output	Start	50%	75%	100%
Efficiency (%)	-	93.0	93.0	93.0
Power Factor	0.43	0.78	0.85	0.87

	Load type	: -
	Load torque	: -
	Load inertia (J=GD²/4)	: -

	Drive end	Non drive end
Bearing type	6312-C3	6212-C3
Lubrication interval	12000 h	15000 h
Lubricant amount	21 g	13 g
Lubricant type	MOBIL POLYREX EM	

Foundation loads
Max. traction : 172 kgf
Max. compression : 437 kgf

Notes:

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)
6.98	5.10	4.61	3.77	2.07	1.38	0.77

Standards

Specification	: MG1 - Part 10	Vibration	: MG1 - Part 7
Test	: MG1 - Part 12	Tolerance	: MG1 - Part 12
Noise	: MG1 - Part 9		

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 +0dB(A).
(3) Approximate weight, subject to be changed 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 1-12.

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/12

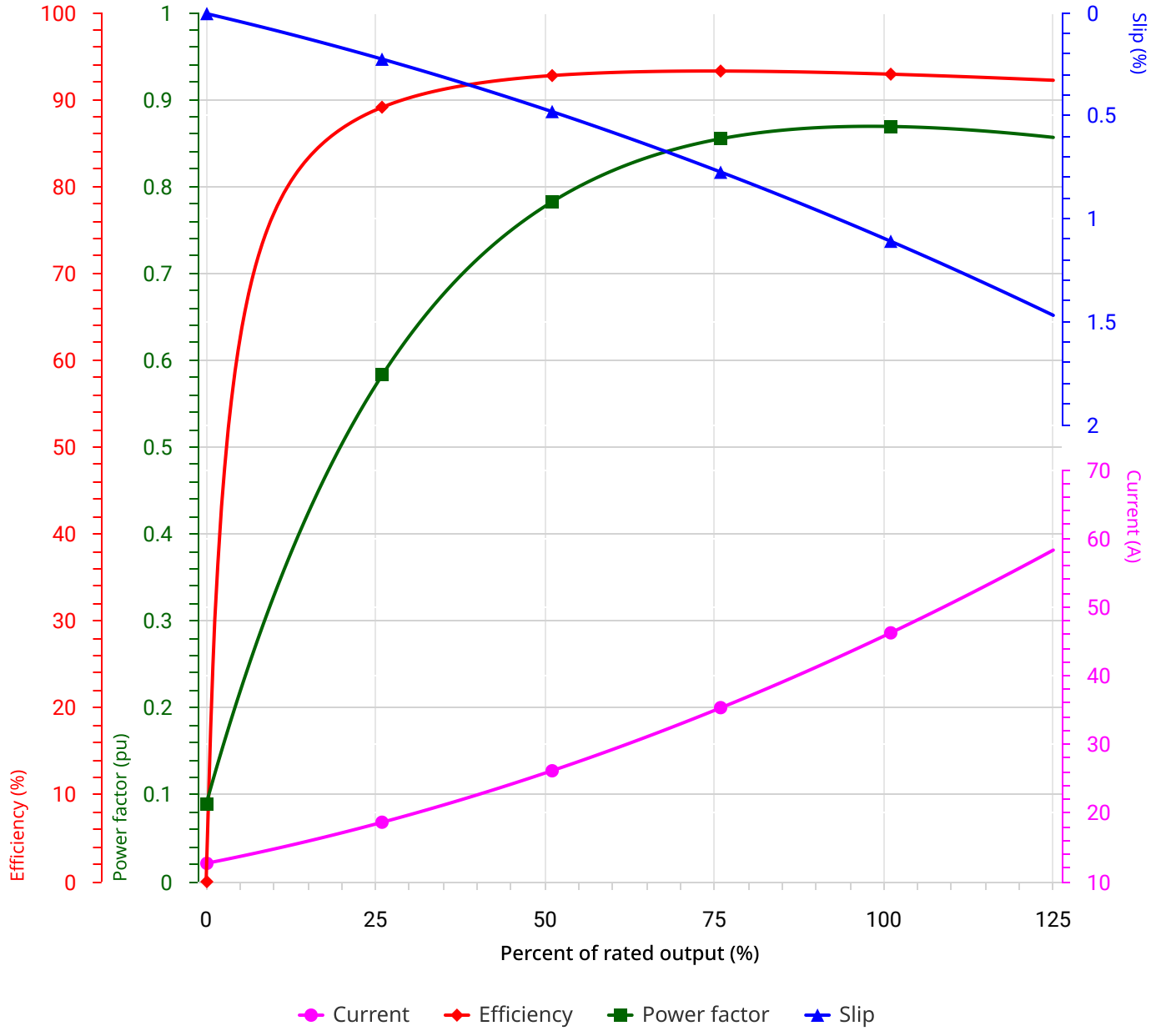
Performed by				
Checked by			Page	Revision
Date	2026/11/12		1/2	0

This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

Customer	:
Product line	: W22 - Nema Premium Efficiency



Performance	: 50 HP (37 kW) 575V 60Hz 2P 324/6TSC

Rated current	: 45.9 A	Moment of inertia (J)	: 0.2422 kgm²
LRC	: 6.3 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 10.2 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/12

Performed by				
Checked by			Page	Revision
Date	2026/11/12		2/2	0

This document is exclusive property of WEG S/A. Reprinting is not allowed without written authorization of WEG S/A.