DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:
Product line	: W22 - Nema Premium Efficiency (Derating)
Product code	: 12161817

Frame	: 143/5T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: B3R(D)
Duty cycle	: S1	Rotation	: Both
Ambient temperature	: -20 °C to +40 °C	Starting method	: Direct On Line
Altitude	: 1000 m	Approx. weight	: 23.5 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0026 kgm²
Design	: B		

Output		2 HP (1.5 kW)	2 HP (1.5 kW)	2 HP (1.5 kW)	2 HP (1.5 kW)	1.5 HP (1.1	1.5 HP (1.1	1.5 HP (1.1
Poles		2	2	2	2	2	2	2
Frequency		60 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Rated voltage		230/460 V	380 V	400 V	415 V	380 V	400 V	415 V
Rated current		5.38/2.69 A	3.18 A	3.03 A	2.99 A	2.47 A	2.42 A	2.43 A
L. R. Amperes		47.9/23.9 A	21.0 A	21.8 A	23.3 A	21.2 A	22.5 A	22.6 A
LRC		8.9 Code L	6.6 Code H	7.2 Code J	7.8 Code K	8.6 Code L	9.3 Code M	9.3 Code M
No load current		2.40/1.20 A	1.20 A	1.30 A	1.50 A	1.20 A	1.30 A	1.40 A
Rated speed		3500 rpm	2855 rpm	2880 rpm	2890 rpm	2915 rpm	2920 rpm	2930 rpm
Slip		2.78 %	4.83 %	4.00 %	3.67 %	2.83 %	2.67 %	2.33 %
Rated torque		0.415 kgfm	0.508 kgfm	0.504 kgfm	0.502 kgfm	0.373 kgfm	0.373 kgfm	0.372 kgfm
Locked rotor torque		270 %	200 %	230 %	250 %	280 %	310 %	340 %
Breakdown torque		380 %	250 %	300 %	300 %	370 %	420 %	440 %
Service factor		1.25	1.25	1.25	1.25	1.25	1.25	1.25
Temperature rise		80 K	80 K	80 K	80 K	80 K	80 K	80 K
Noise level		68 dB(A)	62 dB(A)	62 dB(A)	62 dB(A)	62 dB(A)	62 dB(A)	62 dB(A)
Locked rotor time		12 s (hot) 22 s (cold)	11 s (hot) 20 s (cold)	12 s (hot) 22 s (cold)	10 s (hot) 18 s (cold)	14 s (hot) 25 s (cold)	14 s (hot) 25 s (cold)	13 s (hot) 23 s (cold)
Efficiency (%)	50%	82.5	82.5	82.5	82.5	81.4	80.3	80.1
	75%	85.5	84.0	84.0	84.0	83.3	83.1	83.1
	100%	85.5	82.5	84.0	84.0	83.5	84.0	84.0
Power Factor	Start	0.67	0.67	0.67	0.67	0.67	0.67	0.67
	50%	0.64	0.71	0.68	0.65	0.61	0.60	0.52
	75%	0.76	0.82	0.79	0.77	0.73	0.69	0.65
	100%	0.82	0.87	0.85	0.83	0.81	0.78	0.75
Losses at normative operating points (speed;torque), in percentage of rated output power								
P1 (0,9;1,0)		15.70	19.64	17.63	17.63	18.29	17.63	17.63
P2 (0,5;1,0)		12.30	15.39	13.82	13.82	14.34	13.82	13.82
P3 (0,25;1,0)		11.61	14.53	13.04	13.04	13.53	13.04	13.04
P4 (0,9;0,5)		8.82	11.03	9.90	9.90	10.28	9.90	9.90
P5 (0,5;0,5)		5.42	6.78	6.09	6.09	6.32	6.09	6.09
P6 (0,5;0,25)		3.93	4.92	4.41	4.41	4.58	4.41	4.41
P7 (0,25;0,25)		2.69	3.36	3.02	3.02	3.13	3.02	3.02

	Drive end	Non drive end
Bearing type	6205-ZZ	6204-ZZ
Lubrication interval	-	-
Lubricant amount	-	-
Lubricant type	POLYUREA BASED GREASE	

Foundation loads
Max. traction : 34 kgf
Max. compression : 58 kgf

Notes:

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

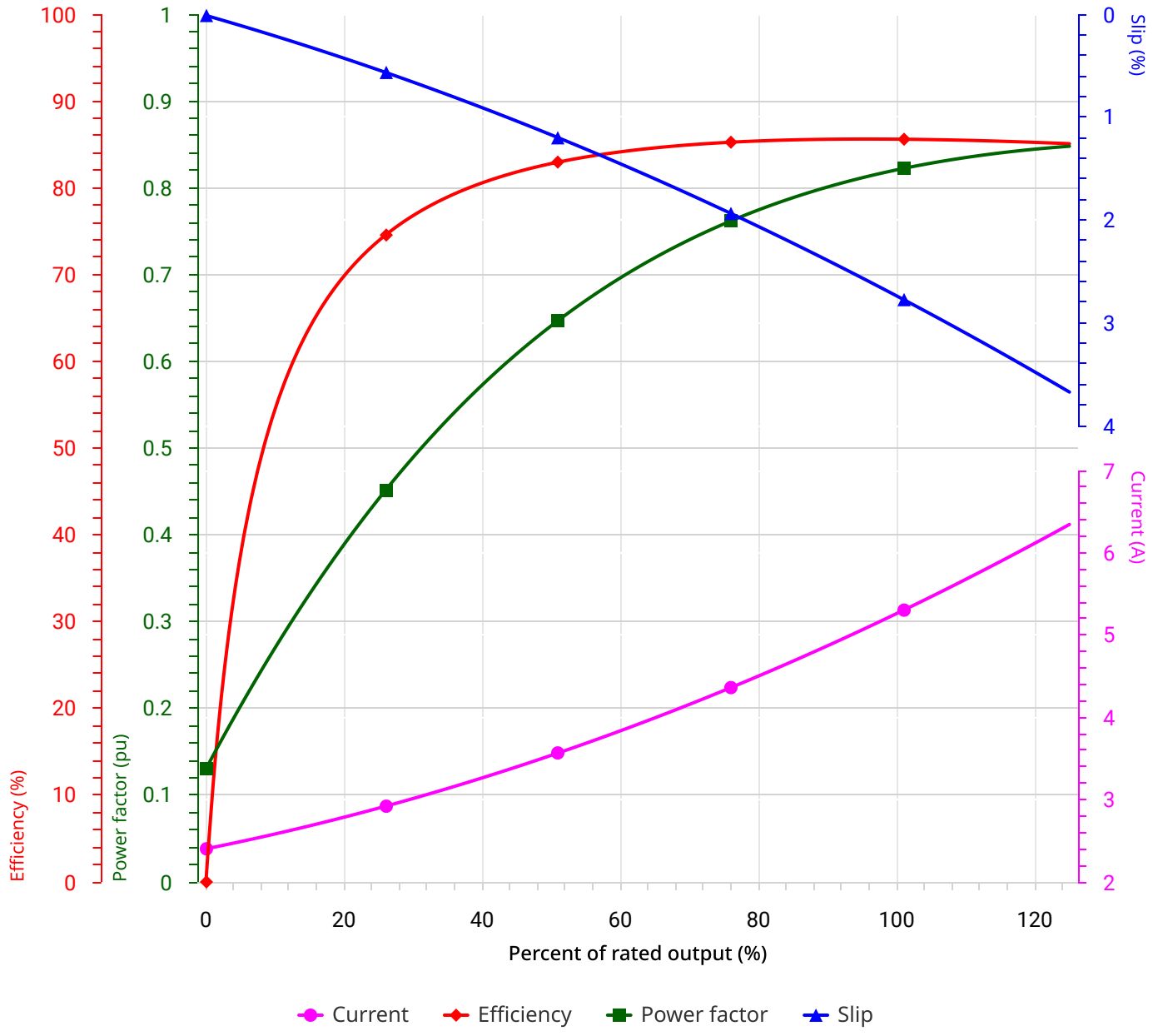
Performed by				
Checked by			Page	Revision
Date	2026/11/09		1/8	0

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 (Derating)
Product code	: 12161817



Performance	: 2 HP (1.5 kW) 208/230/460V 60Hz 2P 143/5T

Rated current	: 5.60/5.38/2.69 A	Moment of inertia (J)	: 0.0026 kgm²
LRC	: 8.9 Code L	Duty cycle	: Cont.(S1)
Rated torque	: 0.415 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.25
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 3500 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

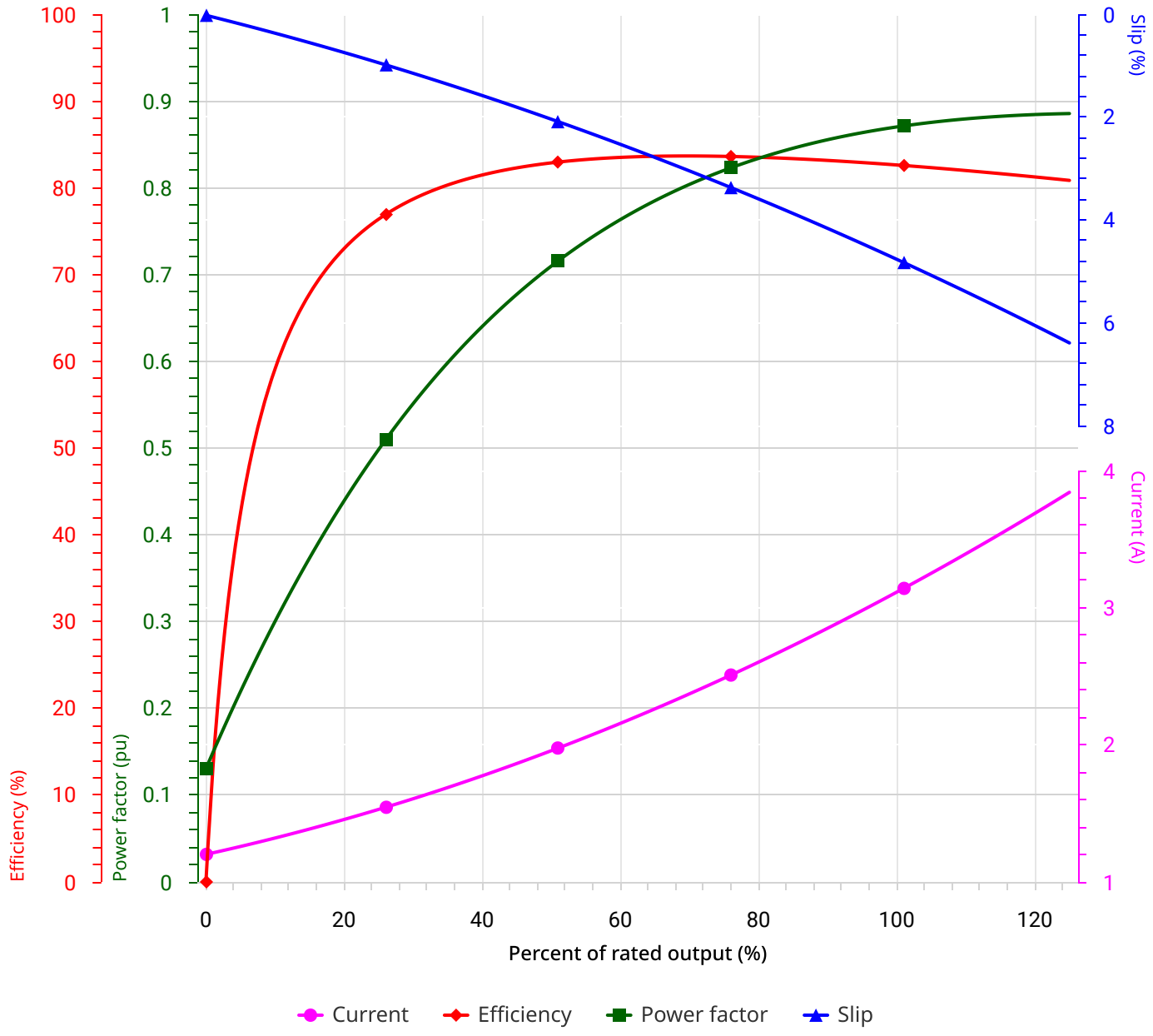
Performed by				
Checked by			Page	Revision
Date	2026/11/09		2/8	0

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 (Derating)
Product code	: 12161817



Performance	: 2 HP (1.5 kW) 380V 50Hz 2P 143/5T

Rated current	: 3.18 A	Moment of inertia (J)	: 0.0026 kgm²
LRC	: 6.6 Code H	Duty cycle	: Cont.(S1)
Rated torque	: 0.508 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 2855 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

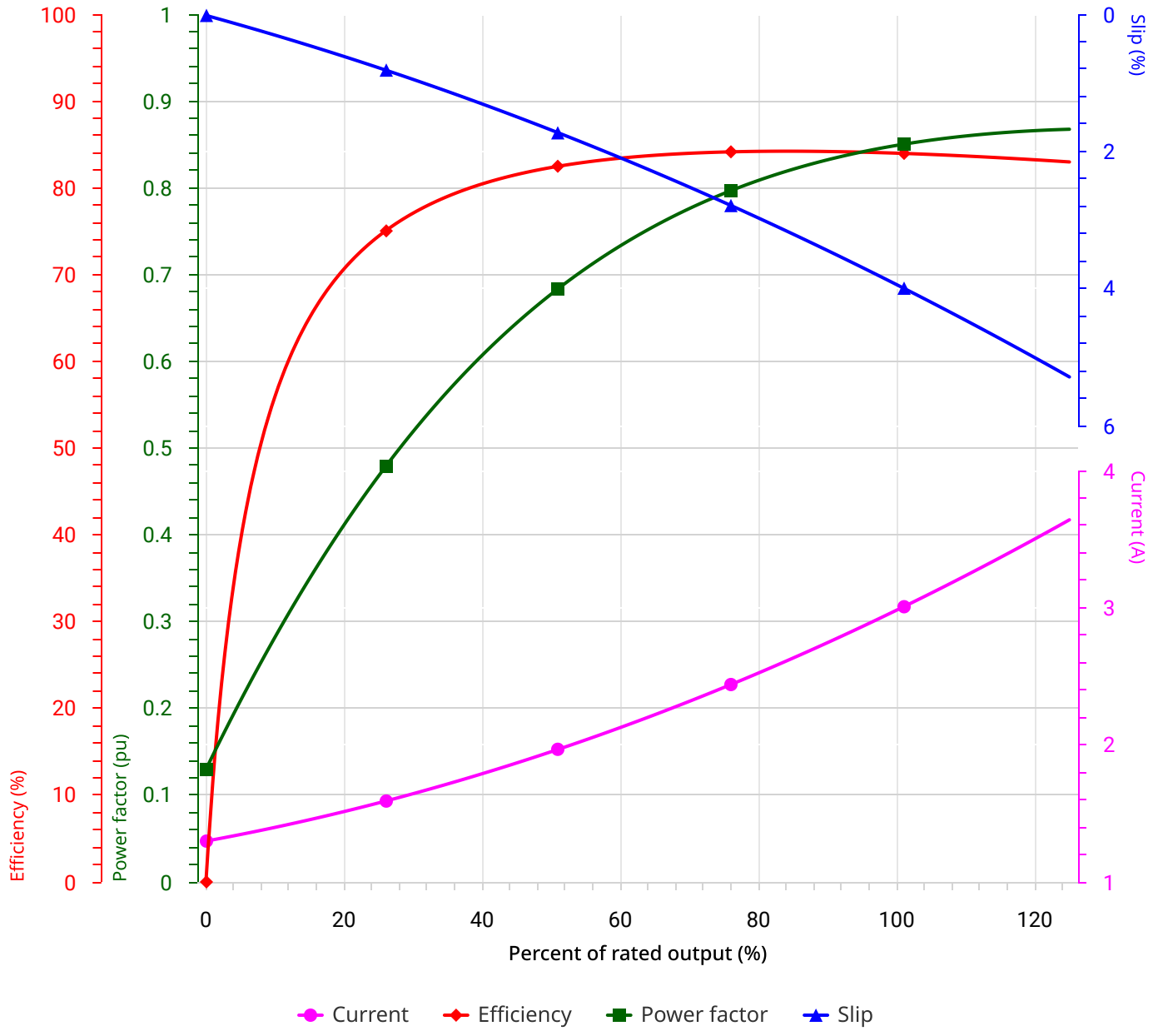
Performed by				
Checked by			Page	Revision
Date	2026/11/09		3/8	0

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 (Derating)
Product code	: 12161817



Performance	: 2 HP (1.5 kW) 400V 50Hz 2P 143/5T		
Rated current	: 3.03 A	Moment of inertia (J)	: 0.0026 kgm²
LRC	: 7.2 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 0.504 kgfm	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2880 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

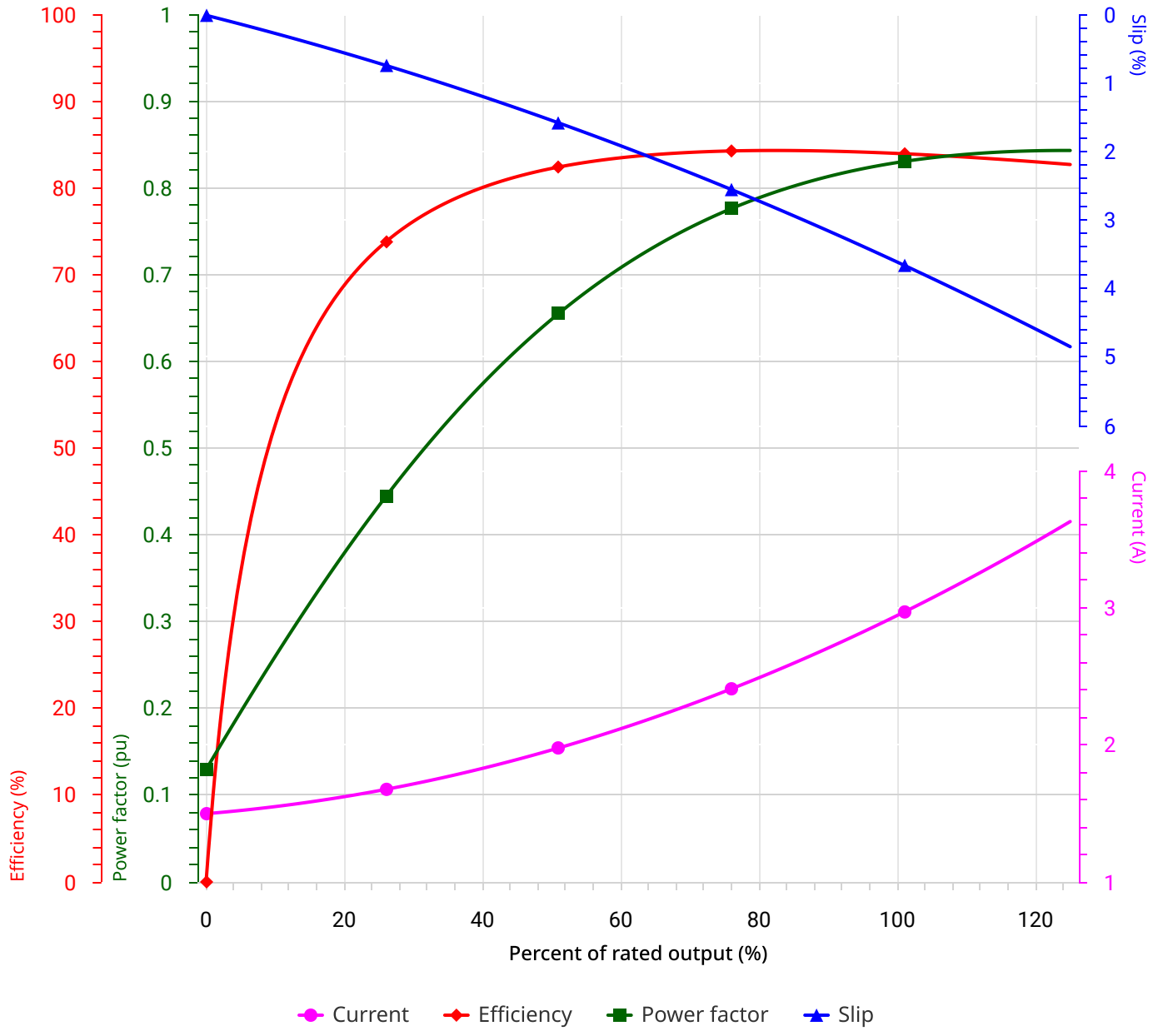
Performed by				
Checked by			Page	Revision
Date	2026/11/09		4/8	0

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 (Derating)
Product code	: 12161817



Performance	: 2 HP (1.5 kW) 415V 50Hz 2P 143/5T		
Rated current	: 2.99 A	Moment of inertia (J)	: 0.0026 kgm²
LRC	: 7.8 Code K	Duty cycle	: Cont.(S1)
Rated torque	: 0.502 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2890 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

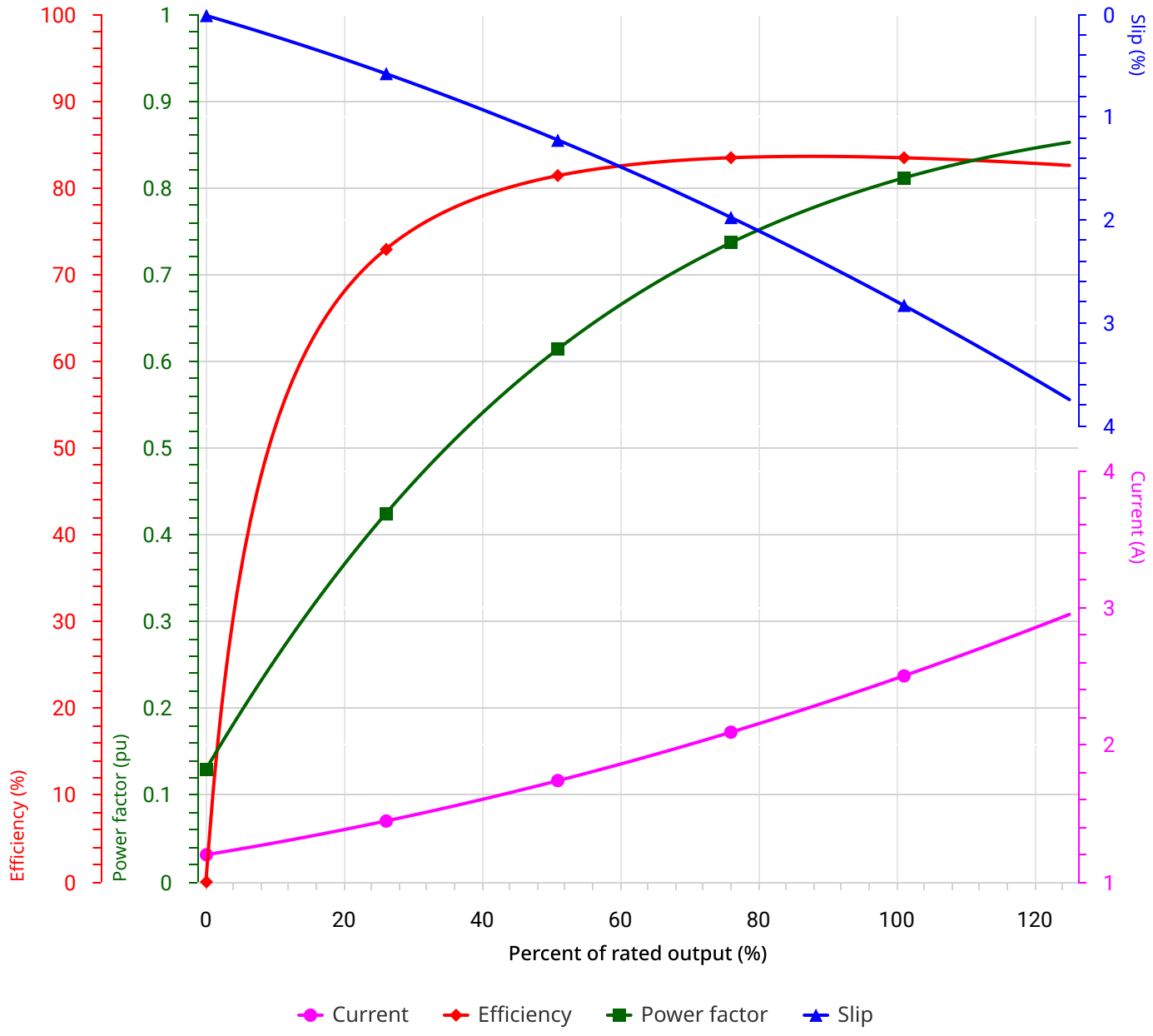
Performed by				
Checked by			Page	Revision
Date	2026/11/09		5/8	0

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 (Derating)
Product code	: 12161817



Performance	: 1.5 HP (1.1 kW) 380V 50Hz 2P 143/5T		
Rated current	: 2.47 A	Moment of inertia (J)	: 0.0026 kgm²
LRC	: 8.6 Code L	Duty cycle	: Cont.(S1)
Rated torque	: 0.373 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 2915 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

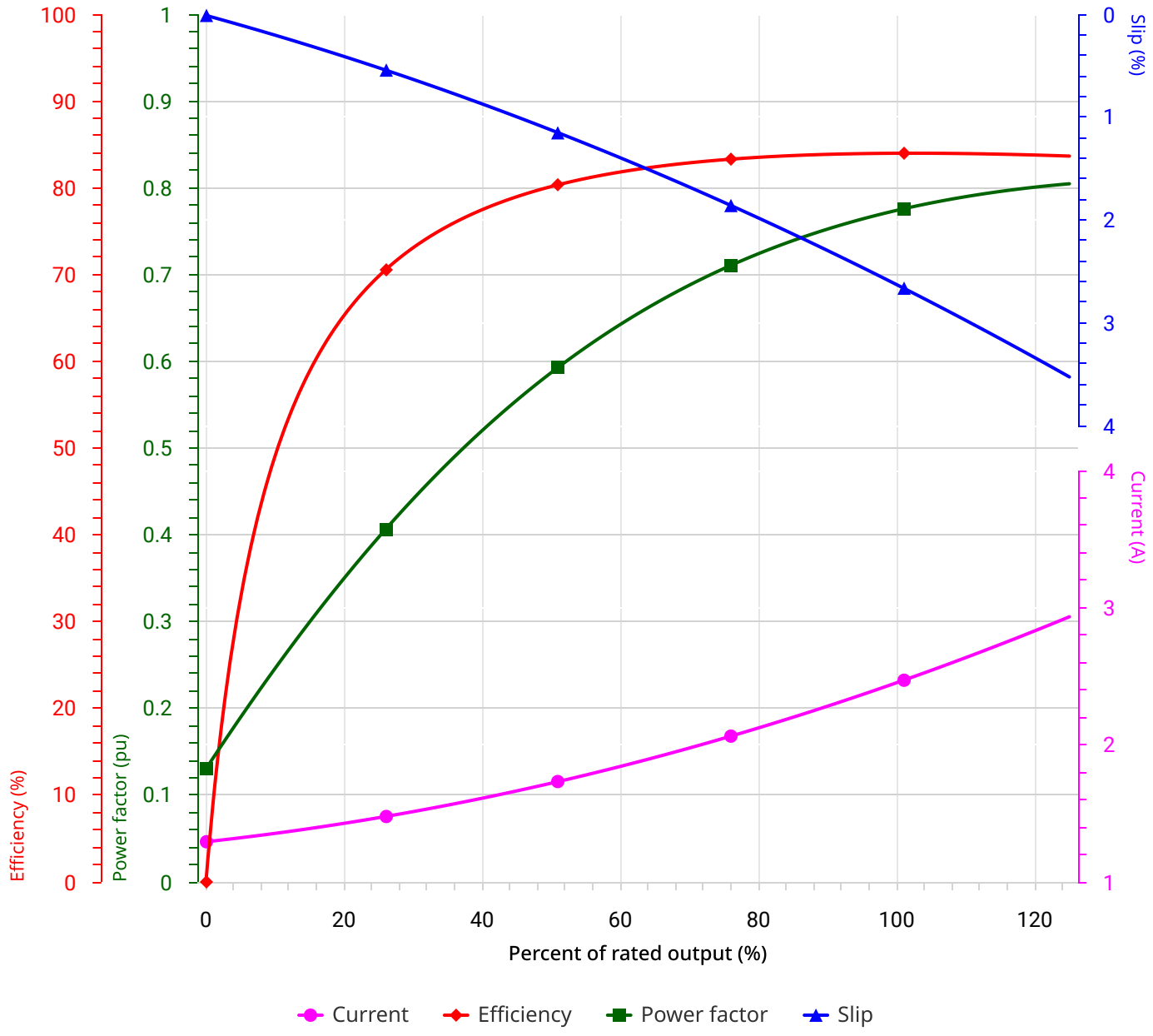
Performed by				
Checked by			Page	Revision
Date	2026/11/09		6/8	0

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 (Derating)
Product code	: 12161817



Performance	: 1.5 HP (1.1 kW) 400V 50Hz 2P 143/5T		
Rated current	: 2.42 A	Moment of inertia (J)	: 0.0026 kgm²
LRC	: 9.3 Code M	Duty cycle	: Cont.(S1)
Rated torque	: 0.373 kgfm	Insulation class	: F
Locked rotor torque	: 310 %	Service factor	: 1.25
Breakdown torque	: 420 %	Temperature rise	: 80 K
Rated speed	: 2920 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

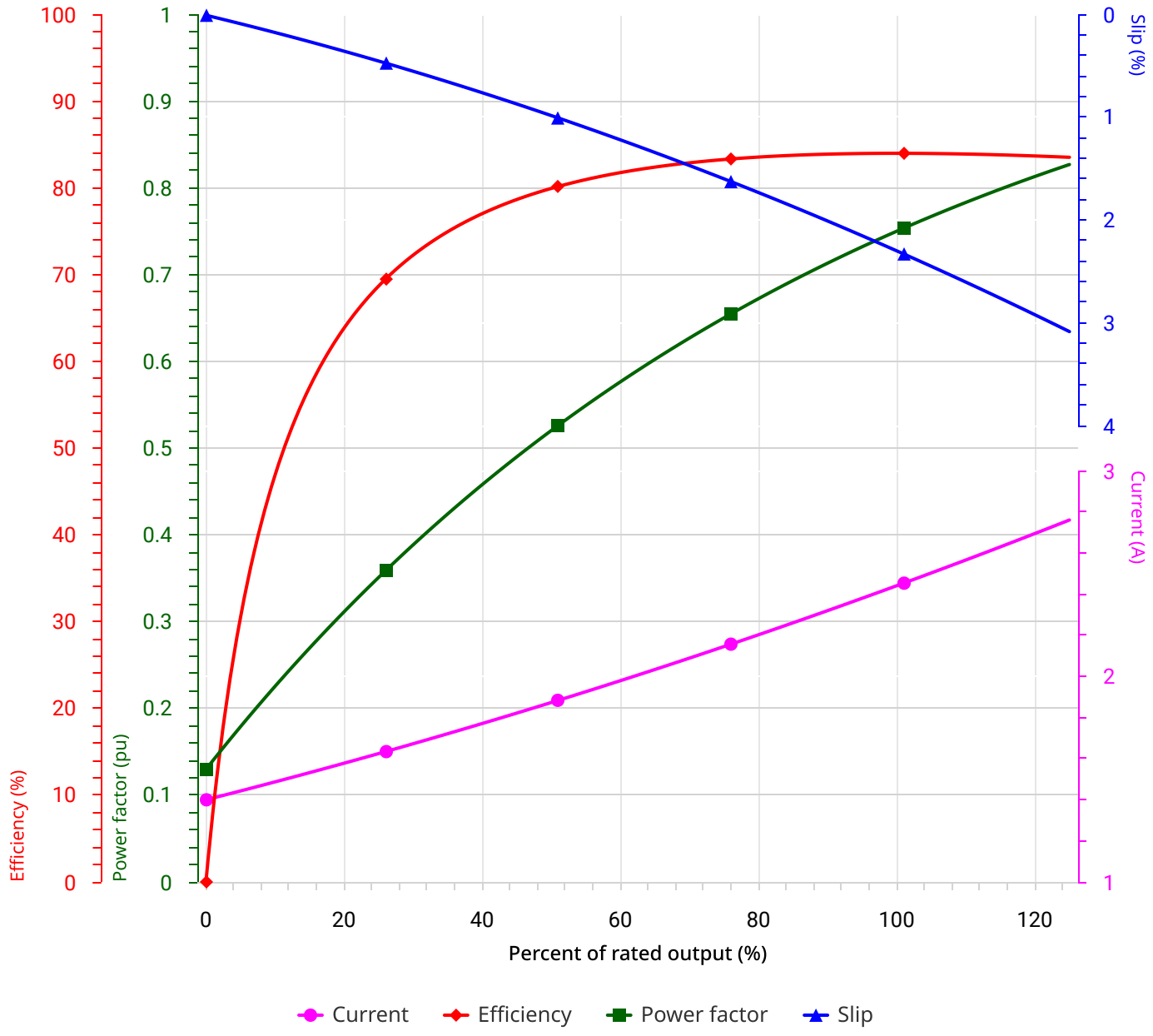
Performed by				
Checked by			Page	Revision
Date	2026/11/09		7/8	0

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 (Derating)
Product code	: 12161817



Performance	: 1.5 HP (1.1 kW) 415V 50Hz 2P 143/5T		
Rated current	: 2.43 A	Moment of inertia (J)	: 0.0026 kgm²
LRC	: 9.3 Code M	Duty cycle	: Cont.(S1)
Rated torque	: 0.372 kgfm	Insulation class	: F
Locked rotor torque	: 340 %	Service factor	: 1.25
Breakdown torque	: 440 %	Temperature rise	: 80 K
Rated speed	: 2930 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/09

Performed by				
Checked by			Page	Revision
Date	2026/11/09		8/8	0

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