DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:

Product line	: W22 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536

Frame	: 254HP	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: V1
Duty cycle	: S1	Rotation	: Both
Ambient temperature	: -20 °C to +40 °C	Starting method	: Direct On Line
Altitude	: 1000 m	Approx. weight	: 122 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.053 kgm²
Design	: B		

Output		15 HP (11 kW)	10 HP (7.5 kW)	10 HP (7.5 kW)	10 HP (7.5 kW)	15 HP (11 kW)	15 HP (11 kW)	15 HP (11 kW)
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		34.5/17.2 A	14.5 A	14.0 A	13.7 A	20.8 A	19.8 A	19.3 A
L. R. Amperes		231/116 A	98.4 A	105 A	108 A	102 A	109 A	114 A
LRC		6.7 Code G	6.8 Code H	7.5 Code J	7.9 Code J	4.9 Code D	5.5 Code F	5.9 Code F
No load current		10.6/5.30 A	5.10 A	5.40 A	5.70 A	5.10 A	5.40 A	5.70 A
Rated speed		3530 rpm	2945 rpm	2950 rpm	2955 rpm	2895 rpm	2910 rpm	2920 rpm
Slip		1.94 %	1.83 %	1.67 %	1.50 %	3.50 %	3.00 %	2.67 %
Rated torque		3.08 kgfm	2.46 kgfm	2.46 kgfm	2.46 kgfm	3.76 kgfm	3.74 kgfm	3.73 kgfm
Locked rotor torque		220 %	200 %	230 %	250 %	170 %	190 %	210 %
Breakdown torque		270 %	310 %	350 %	380 %	200 %	230 %	240 %
Service factor		1.25	1.25	1.25	1.25	1.00	1.00	1.15
Temperature rise		80 K	80 K	80 K	80 K	80 K	80 K	80 K
Noise level		72 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)
Locked rotor time		21 s (hot) 38 s (cold)	29 s (hot) 52 s (cold)	27 s (hot) 49 s (cold)	25 s (hot) 45 s (cold)	15 s (hot) 27 s (cold)	16 s (hot) 29 s (cold)	16 s (hot) 29 s (cold)
Efficiency (%)	50%	89.5	90.3	90.1	89.9	89.5	90.2	90.2
	75%	91.0	90.5	90.7	90.8	90.2	90.2	91.0
	100%	91.0	90.5	90.7	90.8	89.5	90.2	90.2
Power Factor	Start	0.44	0.51	0.52	0.52	0.44	0.44	0.44
	50%	0.77	0.73	0.69	0.67	0.82	0.80	0.78
	75%	0.85	0.83	0.80	0.78	0.88	0.86	0.86
	100%	0.88	0.87	0.85	0.84	0.9	0.89	0.88
Losses at normative operating points (speed;torque), in percentage of rated output power								
P1 (0,9;1,0)		9.42	9.99	9.76	9.65	11.17	10.34	10.34
P2 (0,5;1,0)		7.57	8.04	7.85	7.76	8.98	8.32	8.32
P3 (0,25;1,0)		6.95	7.37	7.20	7.12	8.24	7.63	7.63
P4 (0,9;0,5)		4.77	5.06	4.95	4.89	5.66	5.24	5.24
P5 (0,5;0,5)		2.84	3.01	2.94	2.91	3.37	3.12	3.12
P6 (0,5;0,25)		1.78	1.88	1.84	1.82	2.11	1.95	1.95
P7 (0,25;0,25)		1.11	1.18	1.15	1.14	1.32	1.22	1.22

	Drive end	Non drive end
Bearing type	6311-C3	6209-C3
Lubrication interval	7000 h	11000 h
Lubricant amount	18 g	9 g
Lubricant type	MOBIL POLYREX EM	

Notes:

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

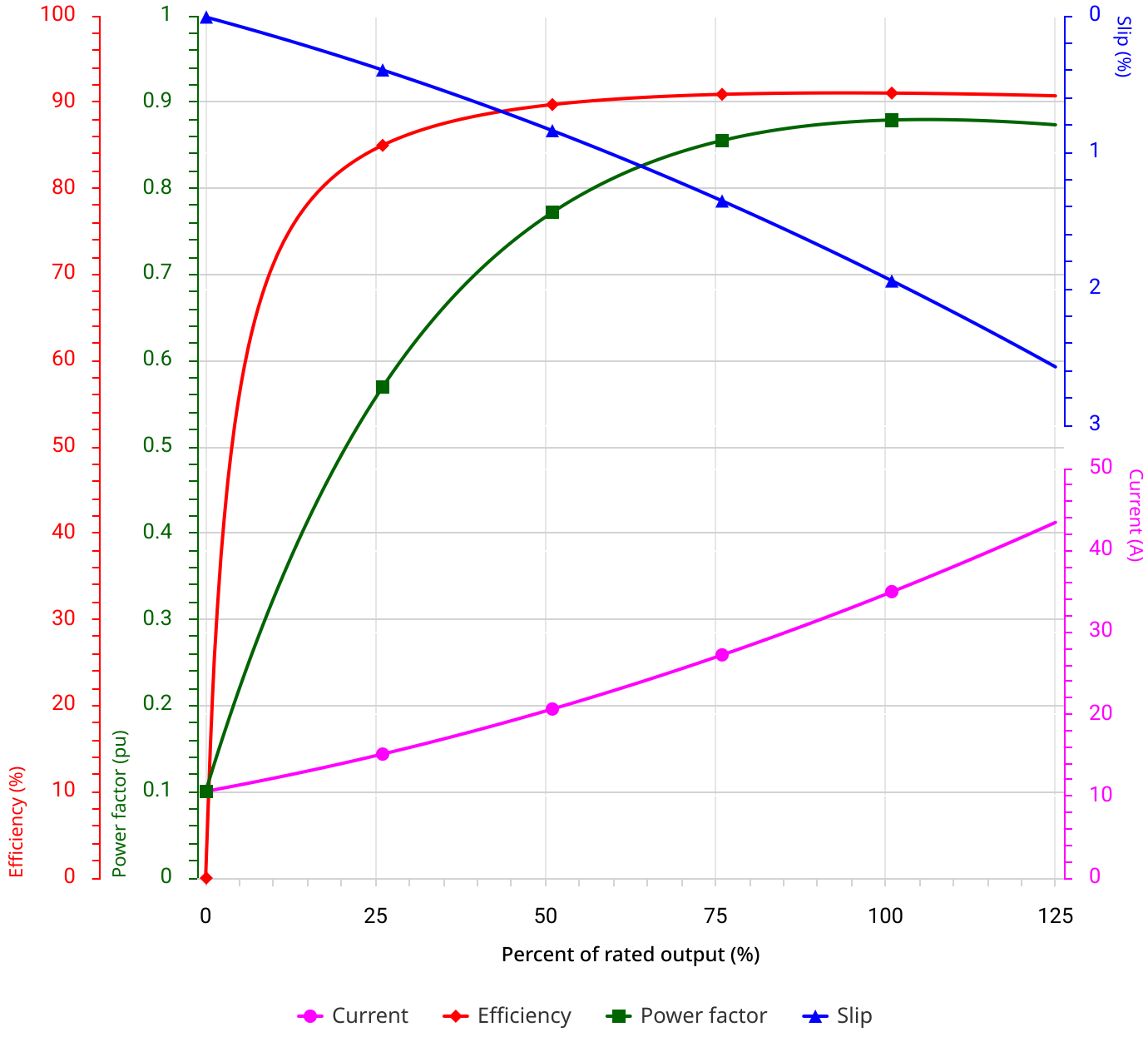
Performed by			
Checked by		Page	Revision
Date	2026/11/24	1/8	0

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 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536



Performance	: 15 HP (11 kW) 230/460V 60Hz 2P 254HP

Rated current	: 34.5/17.2 A	Moment of inertia (J)	: 0.053 kgm²
LRC	: 6.7 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 3.08 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 3530 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

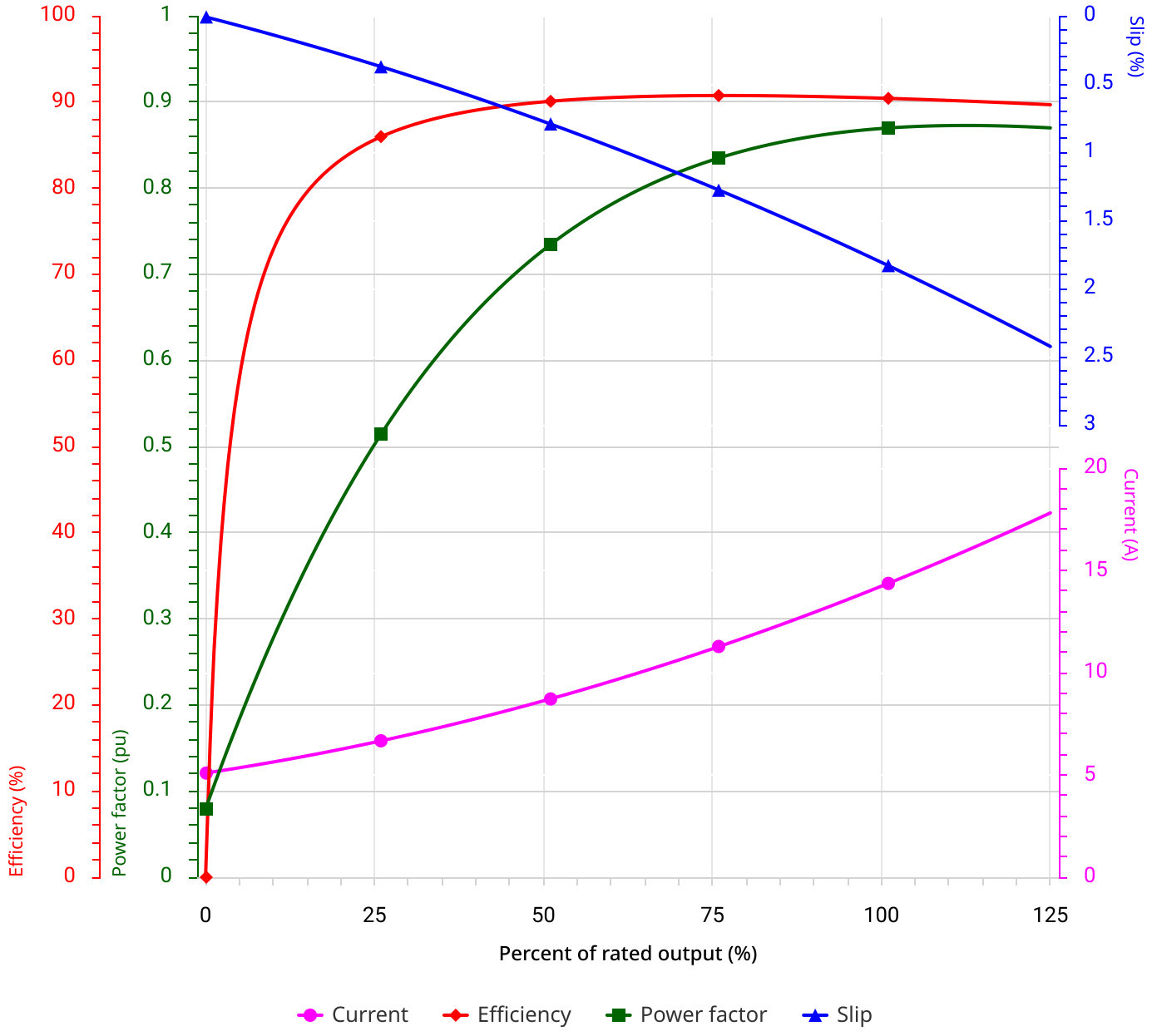
Performed by				
Checked by			Page	Revision
Date	2026/11/24		2/8	0

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 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536



Performance	: 10 HP (7.5 kW) 380V 50Hz 2P 254HP

Rated current	: 14.5 A	Moment of inertia (J)	: 0.053 kgm²
LRC	: 6.8 Code H	Duty cycle	: Cont.(S1)
Rated torque	: 2.46 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

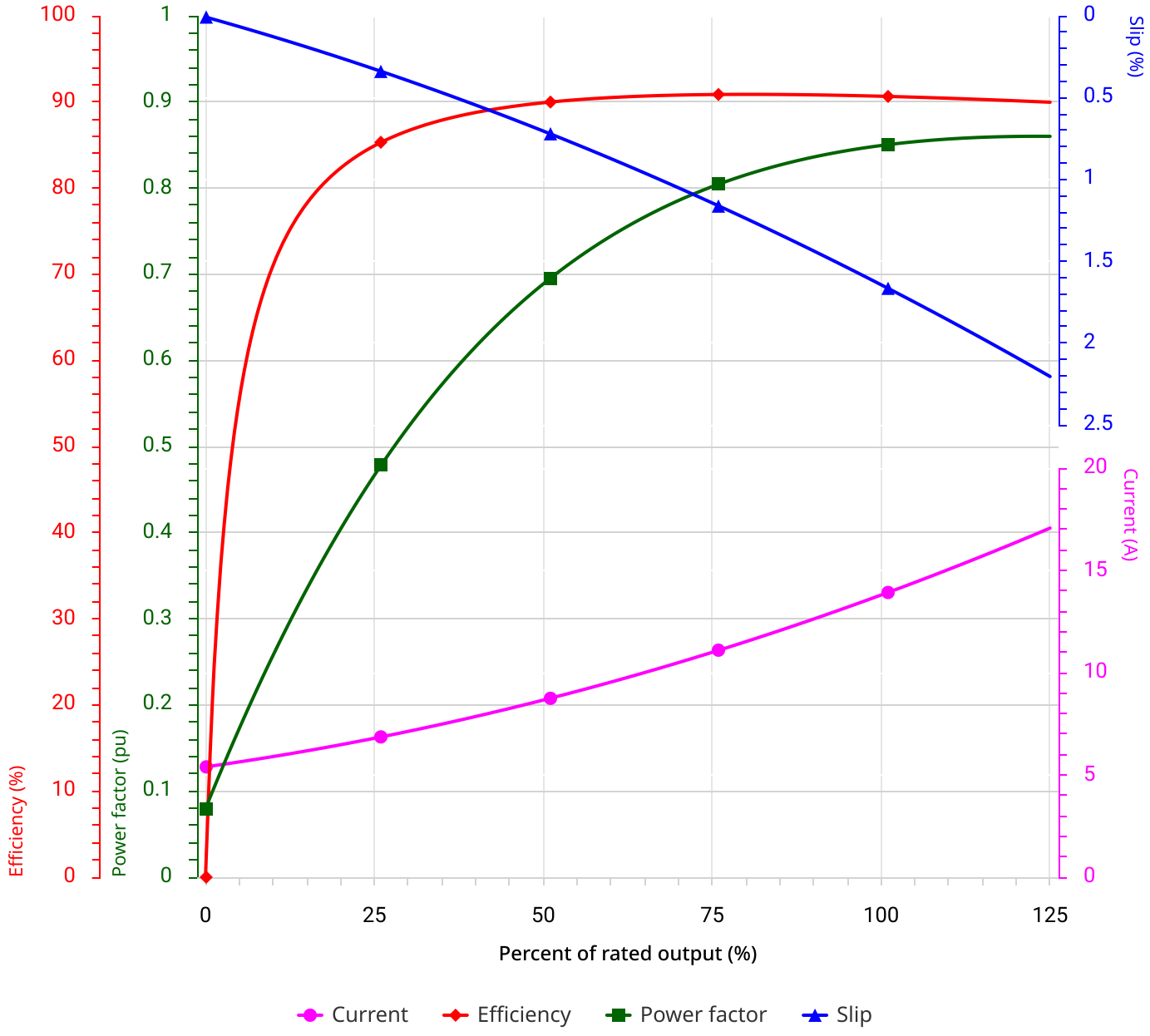
Performed by				
Checked by			Page	Revision
Date	2026/11/24		3/8	0

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 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536



Performance	: 10 HP (7.5 kW) 400V 50Hz 2P 254HP

Rated current	: 14.0 A	Moment of inertia (J)	: 0.053 kgm²
LRC	: 7.5 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 2.46 kgfm	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.25
Breakdown torque	: 350 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

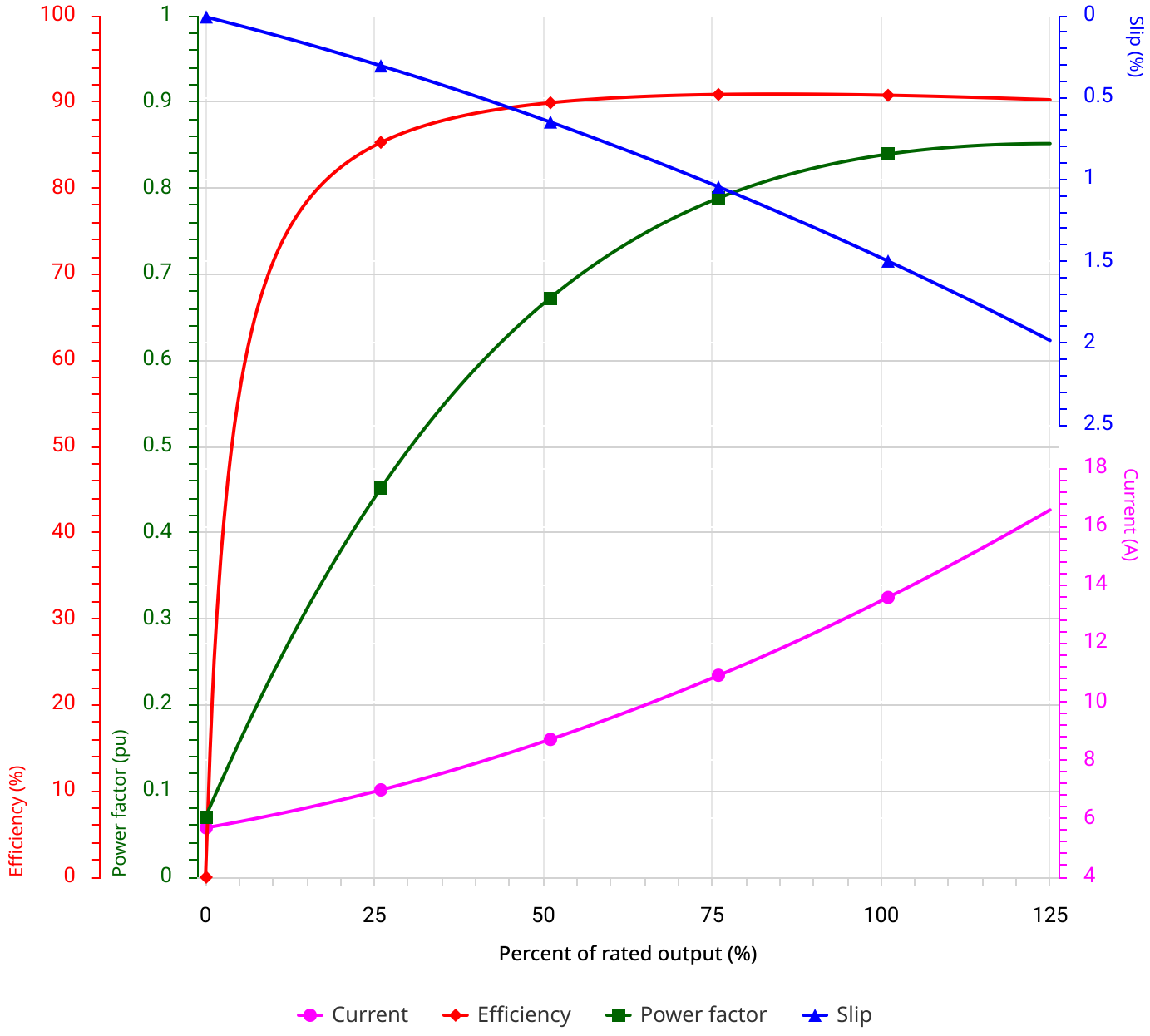
Performed by				
Checked by			Page	Revision
Date	2026/11/24		4/8	0

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 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536



Performance	: 10 HP (7.5 kW) 415V 50Hz 2P 254HP

Rated current	: 13.7 A	Moment of inertia (J)	: 0.053 kgm²
LRC	: 7.9 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 2.46 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.25
Breakdown torque	: 380 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

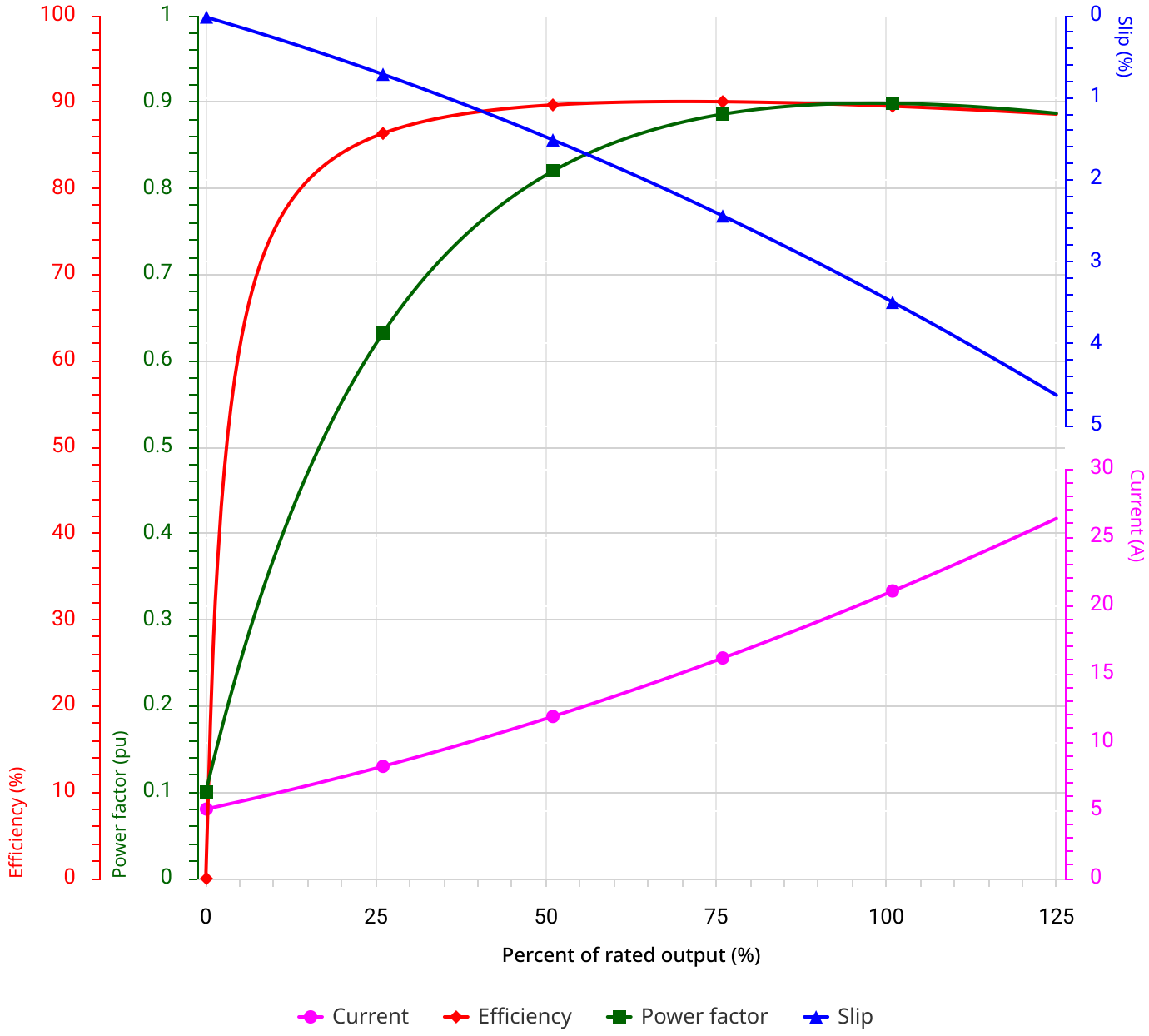
Performed by				
Checked by			Page	Revision
Date	2026/11/24		5/8	0

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 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536



Performance	: 15 HP (11 kW) 380V 50Hz 2P 254HP

Rated current	: 20.8 A	Moment of inertia (J)	: 0.053 kgm²
LRC	: 4.9 Code D	Duty cycle	: Cont.(S1)
Rated torque	: 3.76 kgfm	Insulation class	: F
Locked rotor torque	: 170 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 80 K
Rated speed	: 2895 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

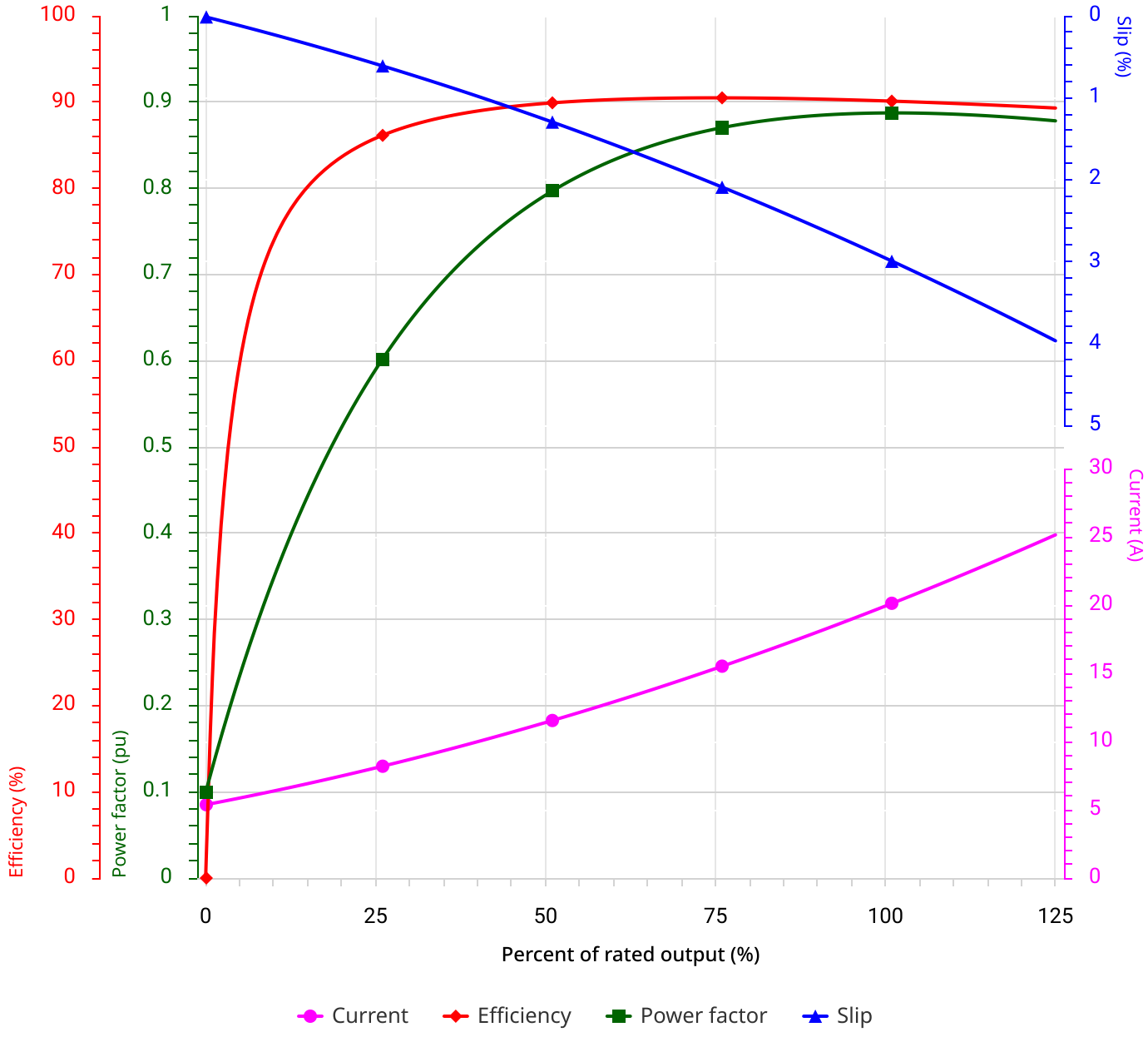
Performed by				
Checked by			Page	Revision
Date	2026/11/24		6/8	0

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 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536



Performance	: 15 HP (11 kW) 400V 50Hz 2P 254HP

Rated current	: 19.8 A	Moment of inertia (J)	: 0.053 kgm²
LRC	: 5.5 Code F	Duty cycle	: Cont.(S1)
Rated torque	: 3.74 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 230 %	Temperature rise	: 80 K
Rated speed	: 2910 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

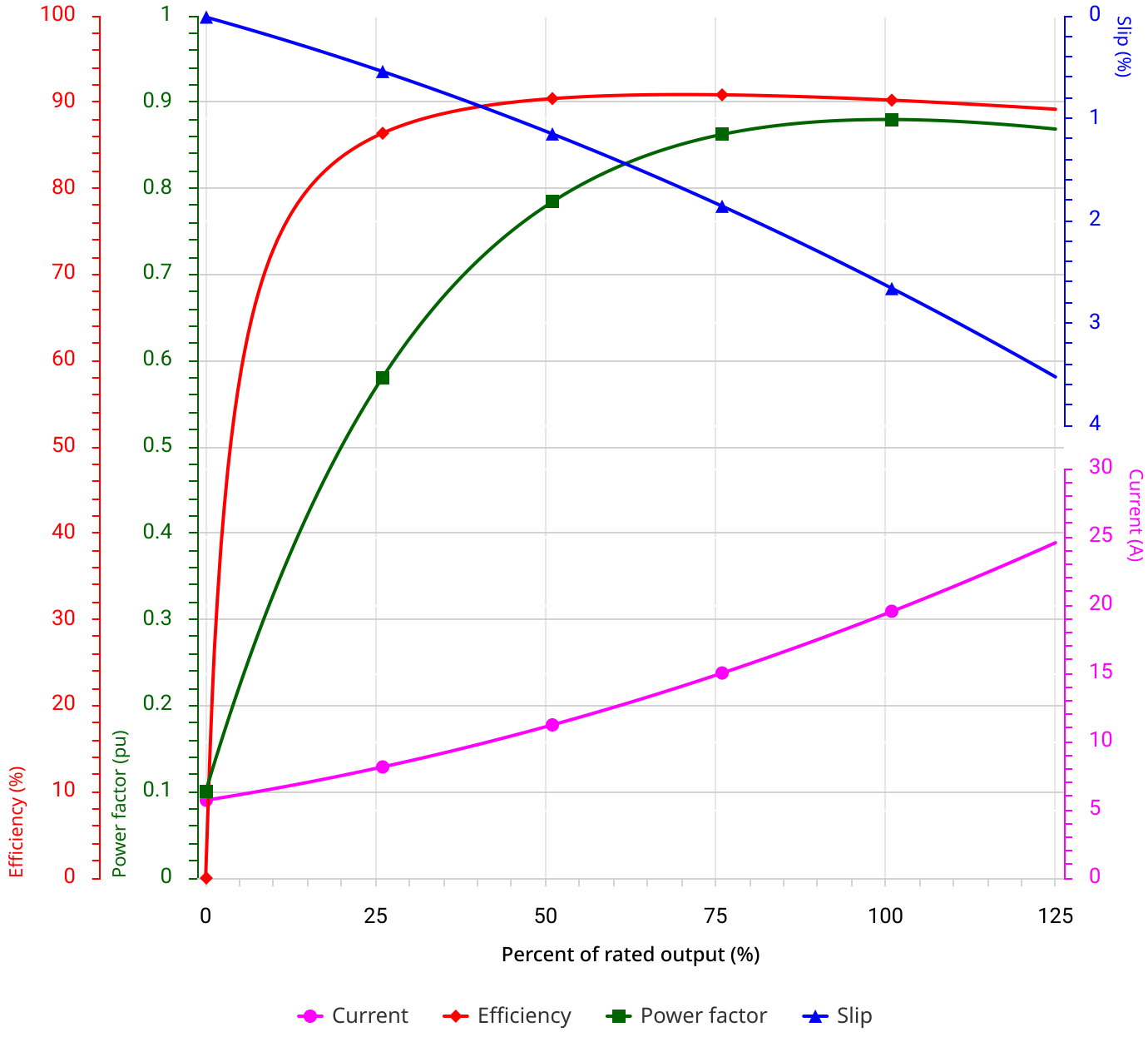
Performed by				
Checked by			Page	Revision
Date	2026/11/24		7/8	0

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 P-base - Nema Premium Efficiency - Derating
Product code	: 13016536



Performance	: 15 HP (11 kW) 415V 50Hz 2P 254HP

Rated current	: 19.3 A	Moment of inertia (J)	: 0.053 kgm²
LRC	: 5.9 Code F	Duty cycle	: Cont.(S1)
Rated torque	: 3.73 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.15
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 2920 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/24

Performed by				
Checked by			Page	Revision
Date	2026/11/24		8/8	0

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