DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:
Product line	: W22 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169

Frame	: 254/6JM	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: B34R(D)
Duty cycle	: S1	Rotation	: Both
Ambient temperature	: -20 °C to +40 °C	Starting method	: Direct On Line
Altitude	: 1000 m	Approx. weight	: 131 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0647 kgm²
Design	: B		

Output		20 HP (15	20 HP (15	15 HP (11	15 HP (11	15 HP (11	20 HP (15	20 HP (15	20 HP (15
Poles		2	2	2	2	2	2	2	2
Frequency		60 Hz	60 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz	50 Hz
Rated voltage		230/460 V	208 V	380 V	400 V	415 V	380 V	400 V	415 V
Rated current		46.5/23.3 A	51.3 A	20.6 A	19.8 A	19.3 A	28.9 A	27.2 A	26.2 A
L. R. Amperes			313 A	144 A	154 A	156 A	148 A	155 A	160 A
LRC		284/142 A	6.1 Code G	7.0 Code H	7.8 Code J	8.1 Code J	5.1 Code E	5.7 Code F	6.1 Code G
No load current		6.1 Code G	9.66 A	5.50 A	6.00 A	6.10 A	5.50 A	6.00 A	6.10 A
Rated speed			3530 rpm	2940 rpm	2945 rpm	2950 rpm	2885 rpm	2905 rpm	2915 rpm
Slip		11.2/5.60 A	1.94 %	2.00 %	1.83 %	1.67 %	3.83 %	3.17 %	2.83 %
Rated torque			4.00 kgfm	3.70 kgfm	3.70 kgfm	3.69 kgfm	5.03 kgfm	5.00 kgfm	4.98 kgfm
Locked rotor torque		3530 rpm	200 %	220 %	240 %	270 %	160 %	180 %	200 %
Breakdown torque		1.94 %	240 %	260 %	280 %	310 %	200 %	210 %	230 %
Service factor		4.11 kgfm	1.25	1.15	1.15	1.15	1.00	1.00	1.00
Temperature rise		200 %	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Noise level		240 %	72.0 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)
Locked rotor time		1.25	14 s (hot) 25 s (cold)	16 s (hot) 29 s (cold)	16 s (hot) 29 s (cold)	16 s (hot) 29 s (cold)	6 s (hot) 11 s (cold)	9 s (hot) 16 s (cold)	10 s (hot) 18 s (cold)
		80 K							
		72 dB(A)							
		14 s (hot) 25 s (cold)							
Efficiency (%)	50%	90.7	90.7	90.6	90.4	89.8	87.2	89.2	89.2
	75%	91.0	91.0	90.9	91.2	91.1	87.5	89.5	89.5
	100%	91.0	91.0	91.2	91.2	91.2	87.5	89.5	89.5
Power Factor	Start	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
	50%	0.79	0.79	0.78	0.75	0.73	0.85	0.82	0.80
	75%	0.86	0.86	0.86	0.84	0.83	0.89	0.88	0.87
	100%	0.89	0.89	0.89	0.88	0.87	0.9	0.89	0.89
Losses at normative operating points (speed;torque), in percentage of rated output power									
P1 (0,9;1,0)		9.54	9.54	9.30	9.30	9.30	13.78	11.31	11.31
P2 (0,5;1,0)		7.93	7.93	7.73	7.73	7.73	11.45	9.40	9.40
P3 (0,25;1,0)		7.33	7.33	7.15	7.15	7.15	10.59	8.70	8.70
P4 (0,9;0,5)		4.37	4.37	4.26	4.26	4.26	6.31	5.18	5.18
P5 (0,5;0,5)		2.71	2.71	2.64	2.64	2.64	3.92	3.22	3.22
P6 (0,5;0,25)		1.55	1.55	1.51	1.51	1.51	2.24	1.84	1.84
P7 (0,25;0,25)		0.97	0.97	0.94	0.94	0.94	1.40	1.15	1.15

	Drive end	Non drive end
Bearing type	6309-C3	6209-C3
Lubrication interval	19000 h	20000 h
Lubricant amount	13 g	9 g
Lubricant type	MOBIL POLYREX EM	

Foundation loads
Max. traction : 112 kgf
Max. compression : 243 kgf

Notes:

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

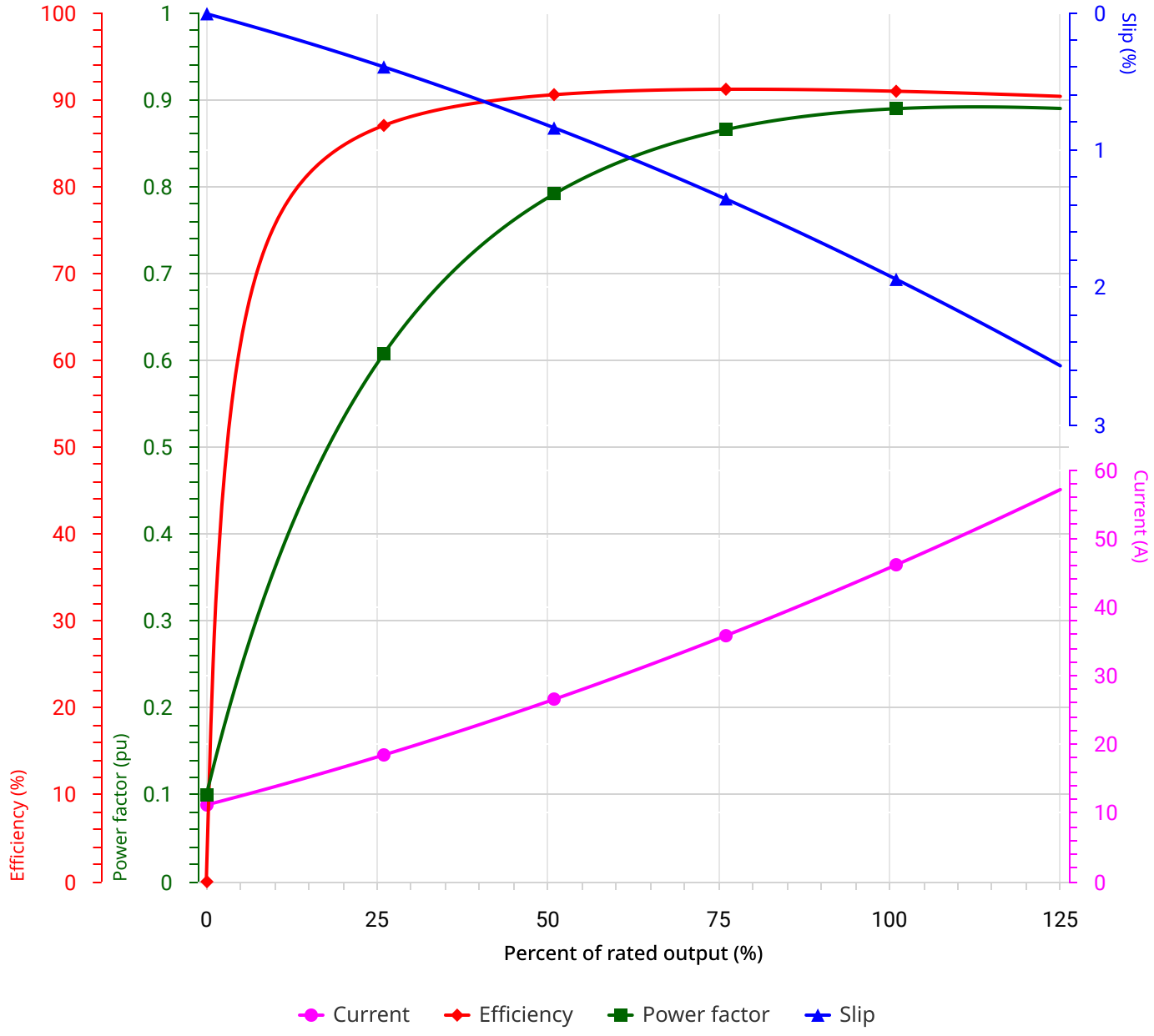
Performed by				
Checked by			Page	Revision
Date	2026/11/14		1/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 20 HP (15 kW) 230/460V 60Hz 2P 254/6JM

Rated current	: 46.5/23.3 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 6.1 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 4.11 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 3530 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

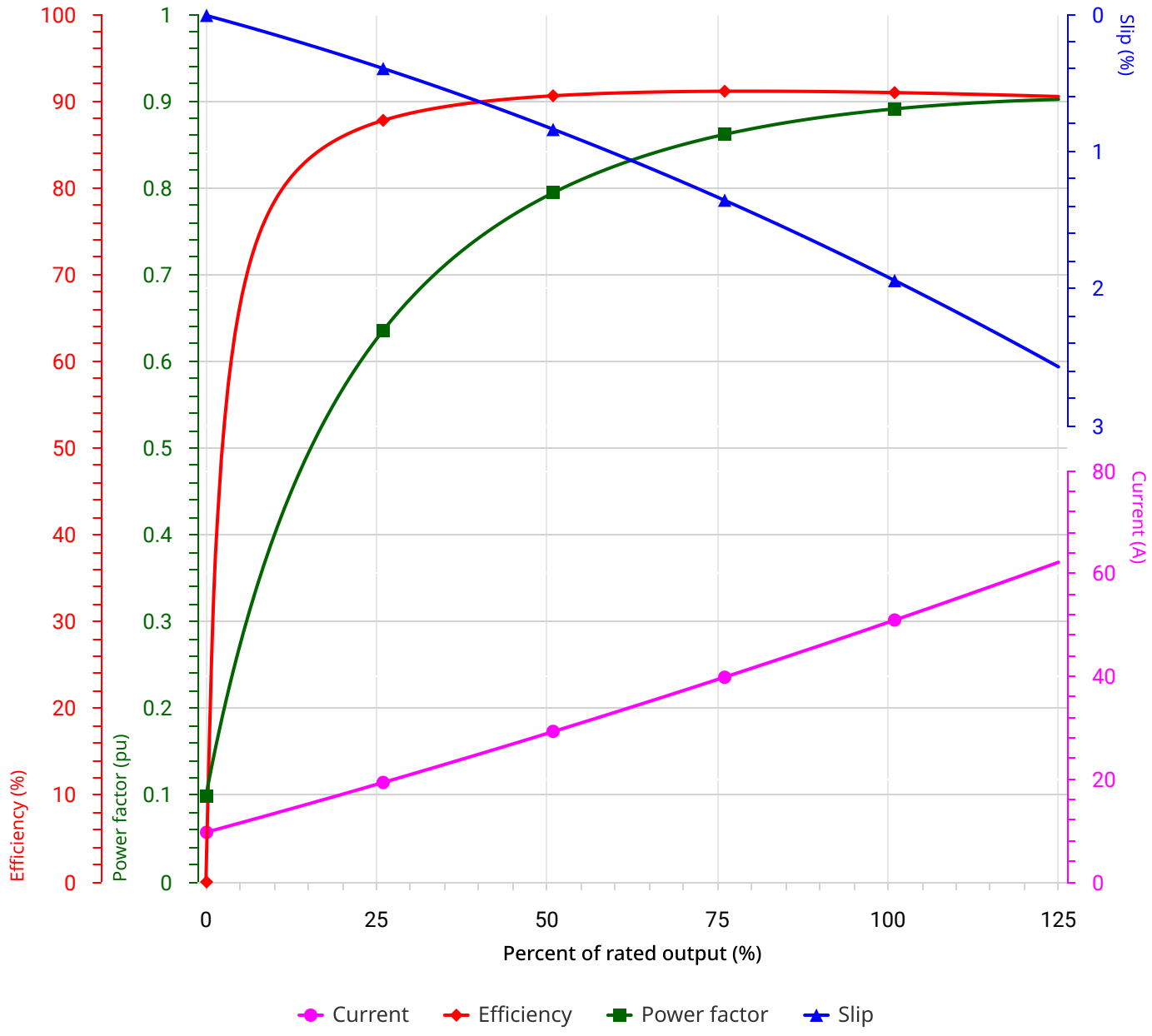
Performed by				
Checked by			Page	Revision
Date	2026/11/14		2/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 20 HP (15 kW) 208V 60Hz 2P 254/6JM

Rated current	: 51.3 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 6.1 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 4.00 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 3530 rpm	Design	: 00002

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

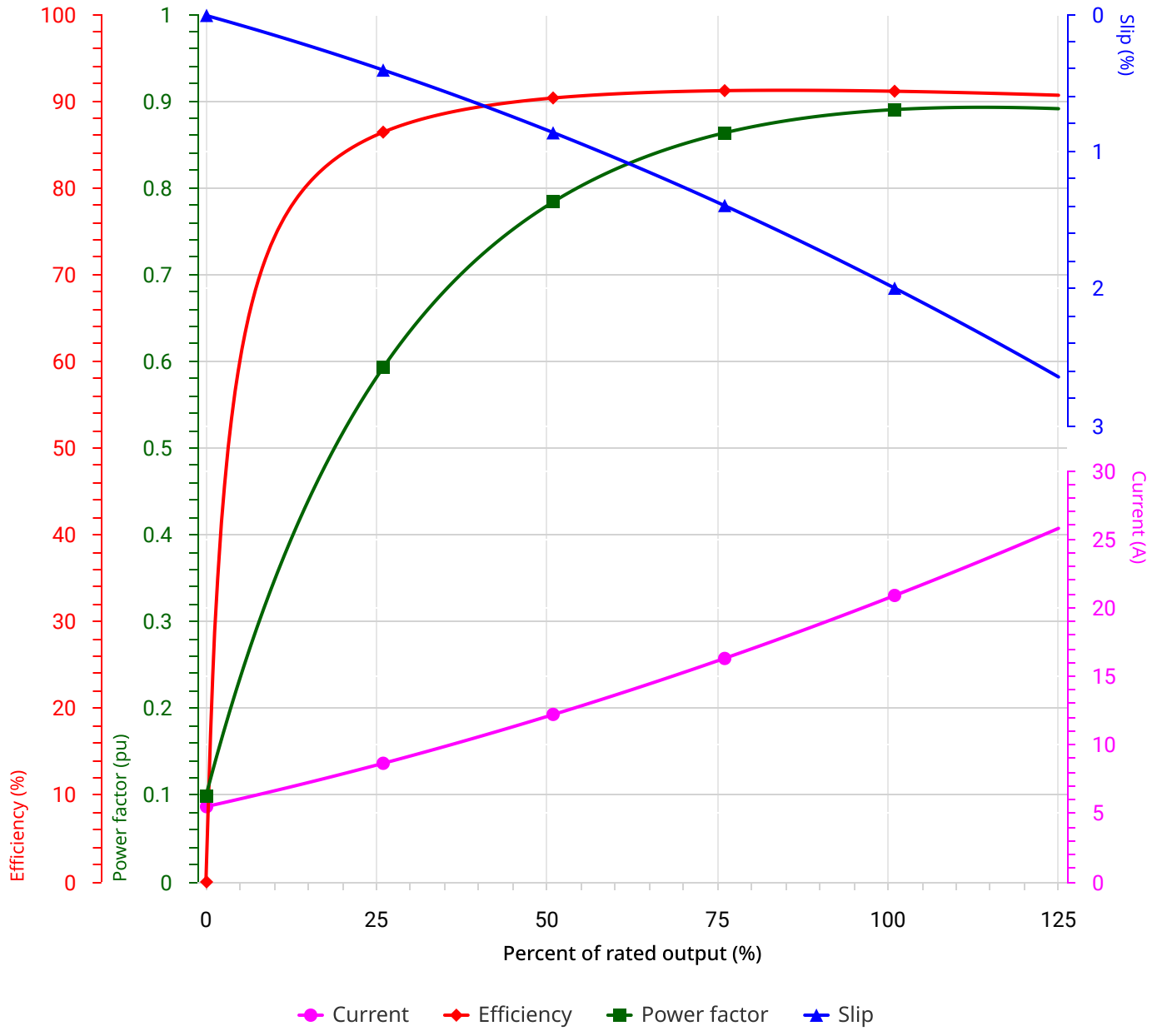
Performed by				
Checked by			Page	Revision
Date	2026/11/14		3/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 15 HP (11 kW) 380V 50Hz 2P 254/6JM

Rated current	: 20.6 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 7.0 Code H	Duty cycle	: Cont.(S1)
Rated torque	: 3.70 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 2940 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

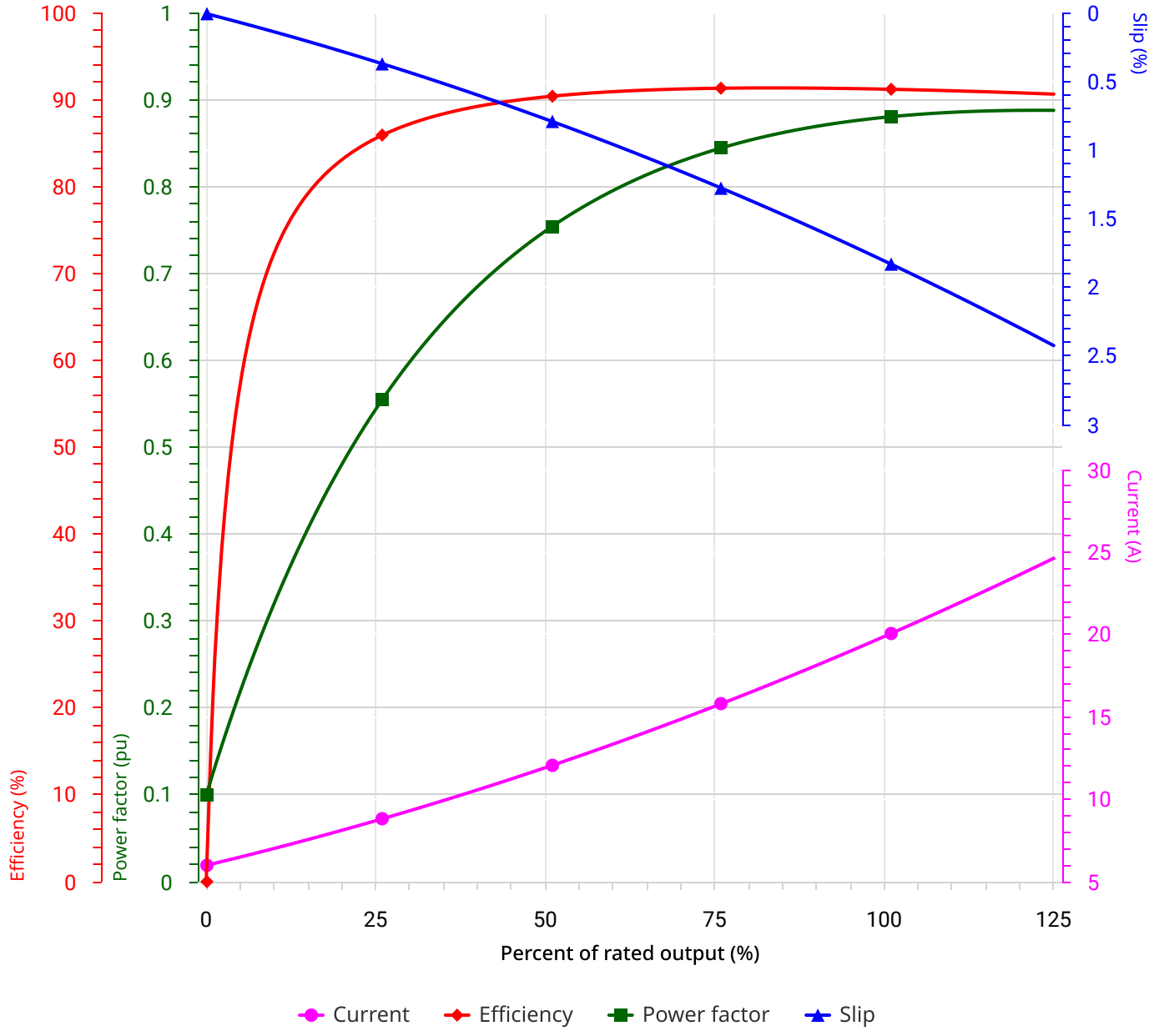
Performed by				
Checked by			Page	Revision
Date	2026/11/14		4/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 15 HP (11 kW) 400V 50Hz 2P 254/6JM

Rated current	: 19.8 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 7.8 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 3.70 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

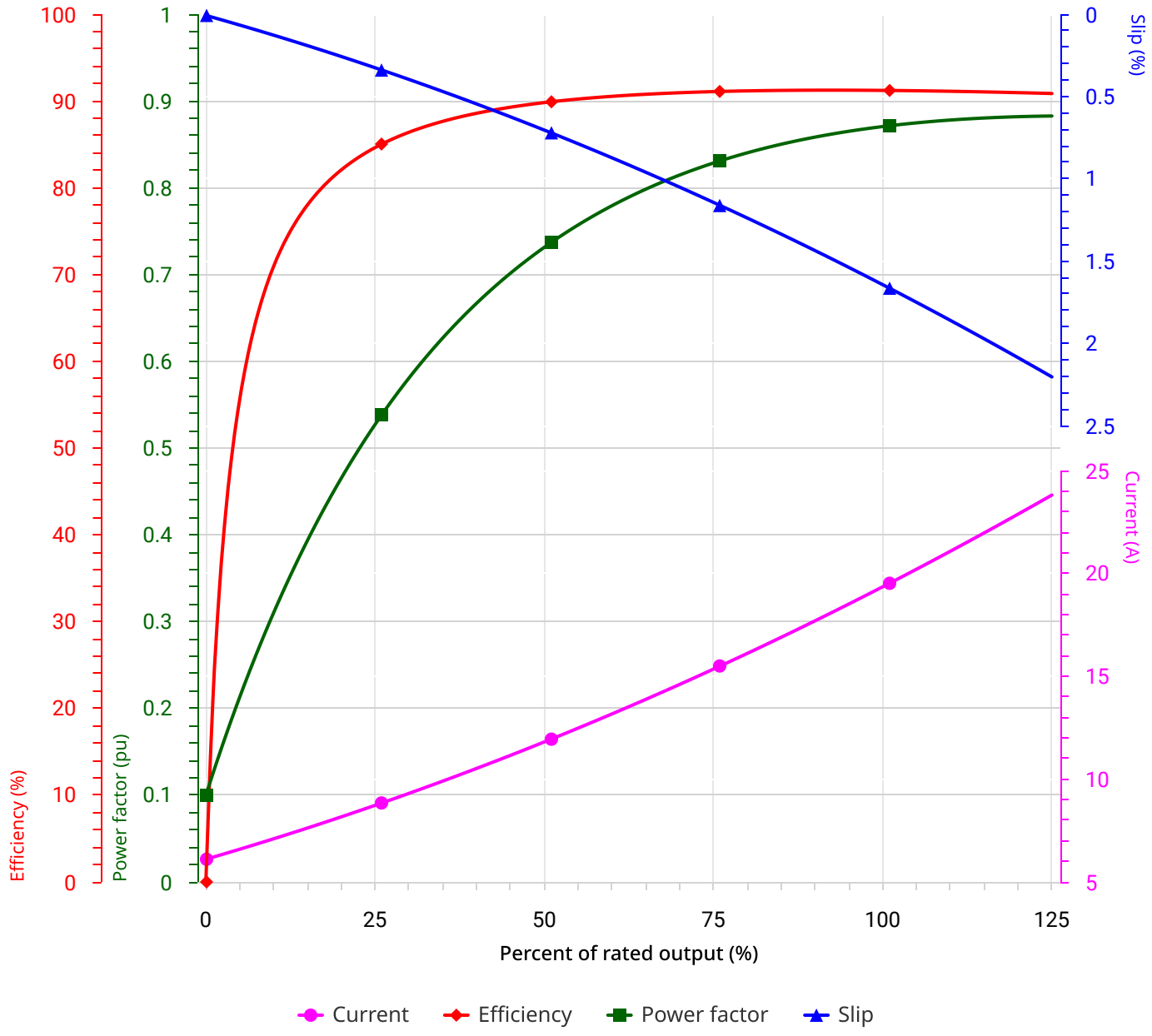
Performed by				
Checked by			Page	Revision
Date	2026/11/14		5/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 15 HP (11 kW) 415V 50Hz 2P 254/6JM

Rated current	: 19.3 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 8.1 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 3.69 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

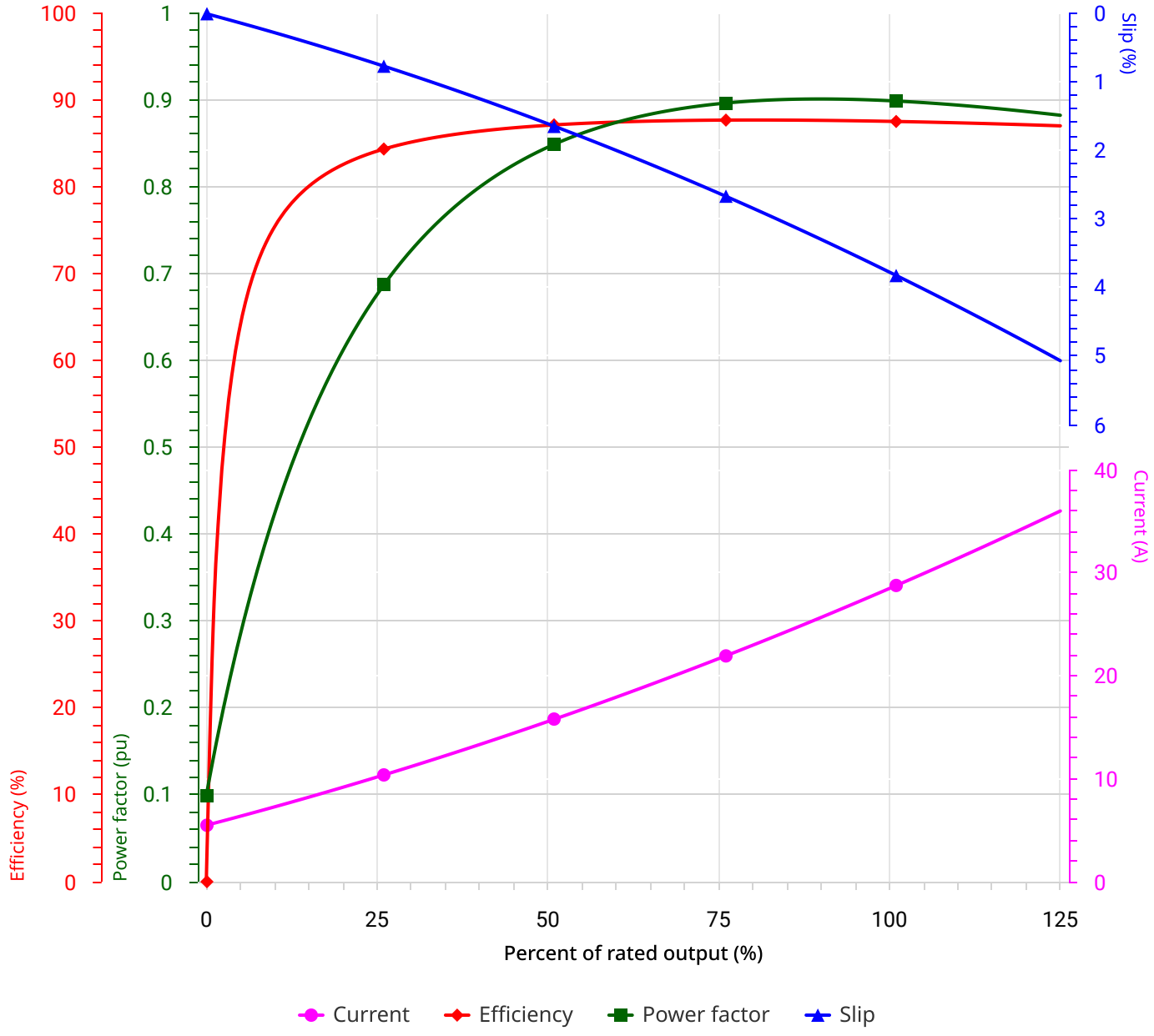
Performed by				
Checked by			Page	Revision
Date	2026/11/14		6/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 20 HP (15 kW) 380V 50Hz 2P 254/6JM

Rated current	: 28.9 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 5.1 Code E	Duty cycle	: Cont.(S1)
Rated torque	: 5.03 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 2885 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

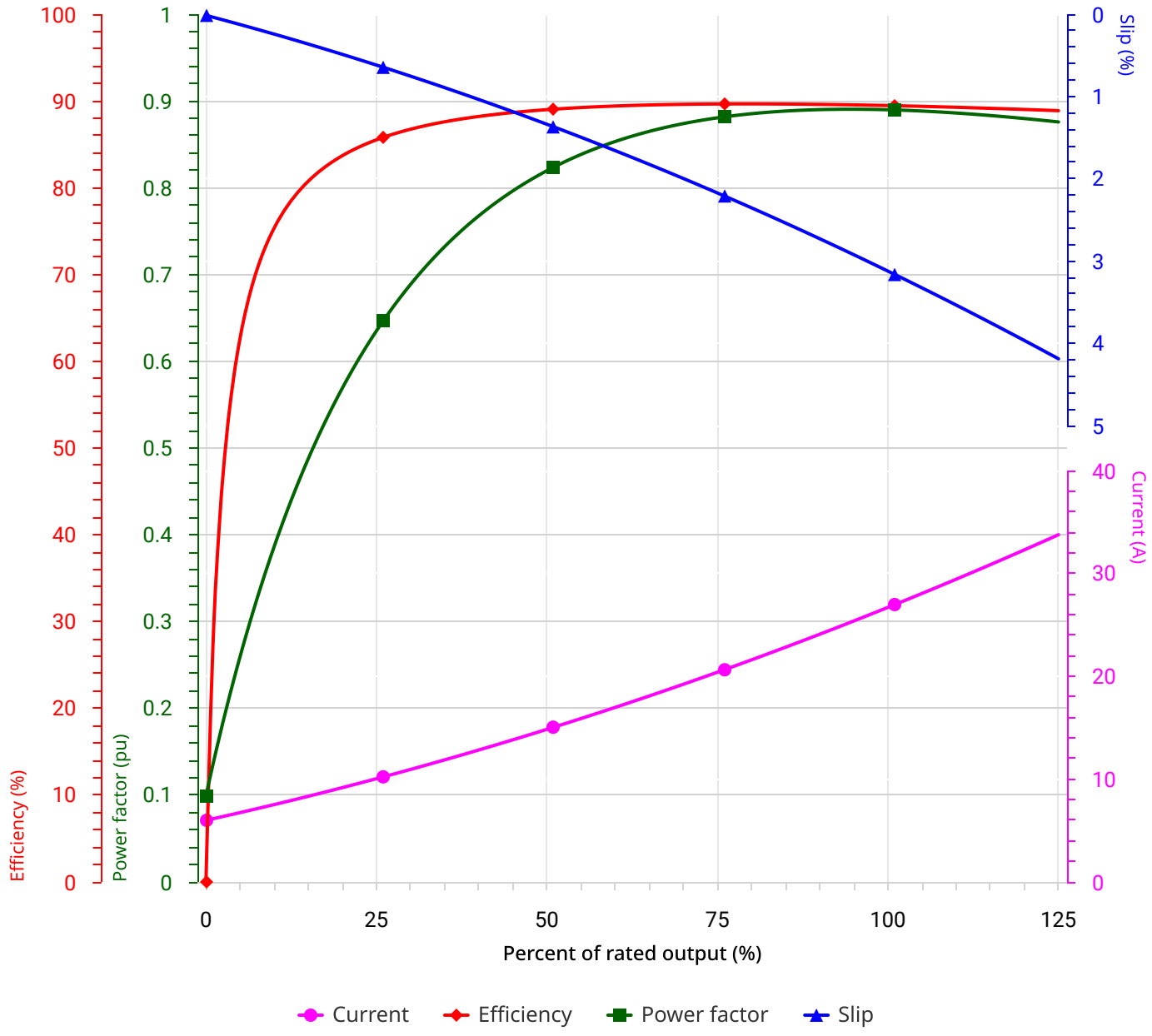
Performed by				
Checked by			Page	Revision
Date	2026/11/14		7/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 20 HP (15 kW) 400V 50Hz 2P 254/6JM

Rated current	: 27.2 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 5.7 Code F	Duty cycle	: Cont.(S1)
Rated torque	: 5.00 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 2905 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

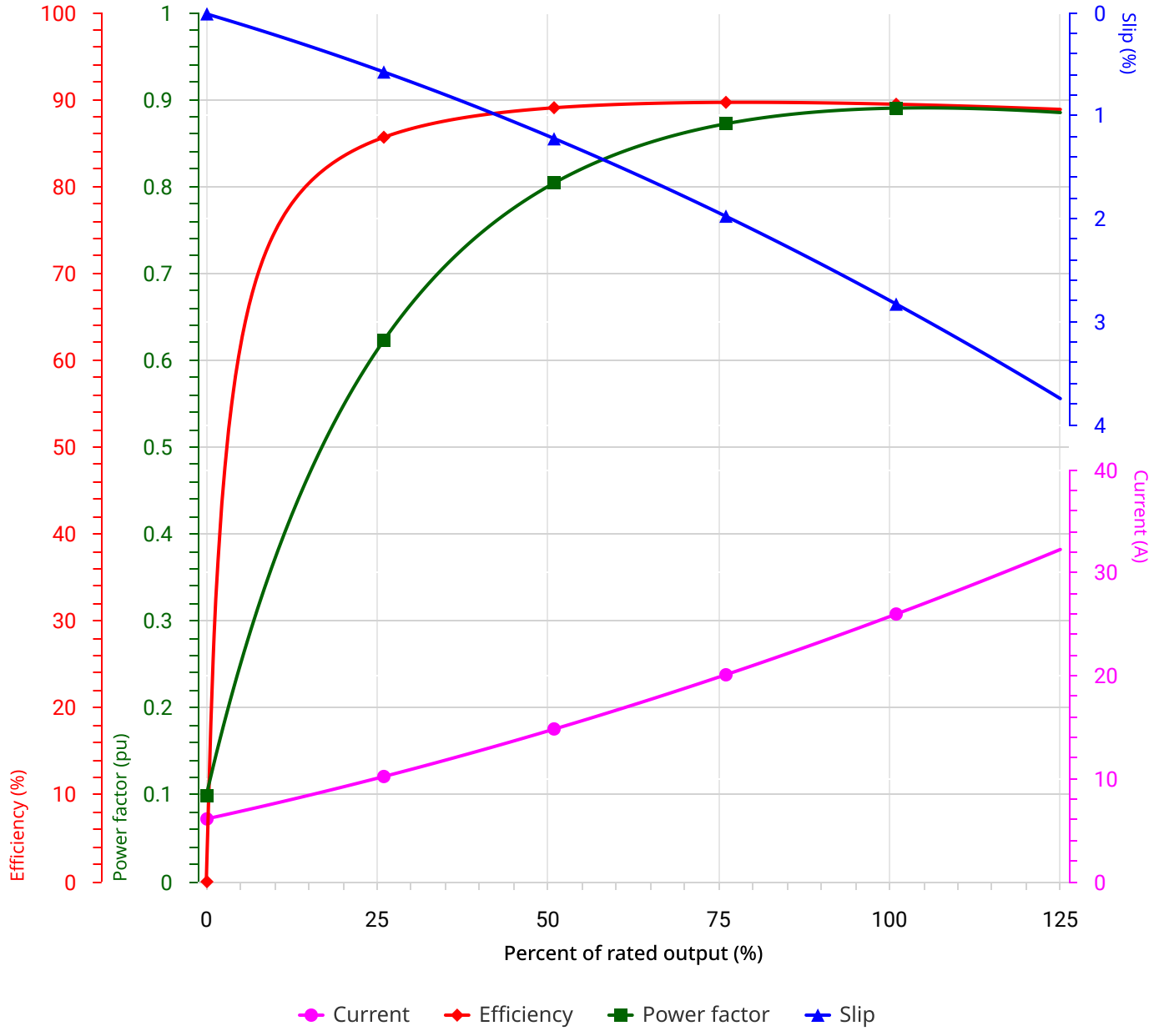
Performed by				
Checked by			Page	Revision
Date	2026/11/14		8/9	0

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 Jet Pump Motors JM - Nema Premium Efficiency - Derating
Product code	: 11641169



Performance	: 20 HP (15 kW) 415V 50Hz 2P 254/6JM

Rated current	: 26.2 A	Moment of inertia (J)	: 0.0647 kgm²
LRC	: 6.1 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 4.98 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 230 %	Temperature rise	: 105 K
Rated speed	: 2915 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/11/14

Performed by				
Checked by			Page	Revision
Date	2026/11/14		9/9	0

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