DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:
Product line	: W22 - Nema Premium Efficiency (Derating)
Product code	: 11438075

Frame	: 324/6TC	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	: 243 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.3861 kgm²
Design	: B		

Output		50 HP (37 kW)	50 HP (37 kW)	50 HP (37 kW)	50 HP (37 kW)	40 HP (30 kW)	40 HP (30 kW)	40 HP (30 kW)
Poles		4	4	4	4	4	4	4
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		118/59.2 A	71.6 A	68.4 A	66.3 A	58.7 A	57.1 A	56.4 A
L. R. Amperes		734/367 A	372 A	397 A	411 A	376 A	400 A	417 A
LRC		6.2 Code G	5.2 Code E	5.8 Code F	6.2 Code G	6.4 Code G	7.0 Code H	7.4 Code J
No load current		47.0/23.5 A	23.0 A	24.0 A	25.0 A	23.0 A	24.0 A	25.0 A
Rated speed		1775 rpm	1460 rpm	1465 rpm	1470 rpm	1475 rpm	1477 rpm	1478 rpm
Slip		1.39 %	2.67 %	2.33 %	2.00 %	1.67 %	1.53 %	1.47 %
Rated torque		20.4 kgfm	24.9 kgfm	24.8 kgfm	24.7 kgfm	19.7 kgfm	19.7 kgfm	19.6 kgfm
Locked rotor torque		230 %	180 %	200 %	210 %	230 %	250 %	260 %
Breakdown torque		270 %	200 %	240 %	260 %	260 %	300 %	330 %
Service factor		1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise		80 K	105 K	105 K	105 K	80 K	80 K	80 K
Noise level		70 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)	67 dB(A)
Locked rotor time		15 s (hot) 27 s (cold)	11 s (hot) 20 s (cold)	11 s (hot) 20 s (cold)	11 s (hot) 20 s (cold)	11 s (hot) 20 s (cold)	11 s (hot) 20 s (cold)	11 s (hot) 20 s (cold)
Efficiency (%)	50%	93.0	93.0	92.4	92.4	92.5	91.5	91.5
	75%	94.1	93.0	93.0	93.0	93.1	92.8	93.0
	100%	94.5	92.4	93.0	93.5	93.6	93.6	93.6
Power Factor	Start	0.42	0.42	0.42	0.42	0.42	0.42	0.42
	50%	0.66	0.72	0.68	0.65	0.64	0.60	0.57
	75%	0.77	0.81	0.79	0.76	0.77	0.73	0.70
	100%	0.83	0.85	0.84	0.83	0.83	0.81	0.79
Losses at normative operating points (speed;torque), in percentage of rated output power								
P1 (0,9;1,0)		5.68	5.68	5.68	5.68	5.68	5.68	5.68
P2 (0,5;1,0)		4.86	4.86	4.86	4.86	4.86	4.86	4.86
P3 (0,25;1,0)		4.74	4.74	4.74	4.74	4.74	4.74	4.74
P4 (0,9;0,5)		2.68	2.68	2.68	2.68	2.68	2.68	2.68
P5 (0,5;0,5)		1.90	1.90	1.90	1.90	1.90	1.90	1.90
P6 (0,5;0,25)		1.22	1.22	1.22	1.22	1.22	1.22	1.22
P7 (0,25;0,25)		0.86	0.86	0.86	0.86	0.86	0.86	0.86

	Drive end	Non drive end
Bearing type	6312-C3	6212-C3
Lubrication interval	20000 h	20000 h
Lubricant amount	21 g	13 g
Lubricant type	MOBIL POLYREX EM	

Foundation loads
Max. traction : 684 kgf
Max. compression : 927 kgf

Notes:
Naval Certification Organism: NOT APPLICABLE
Naval Service: NOT APPLICABLE

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

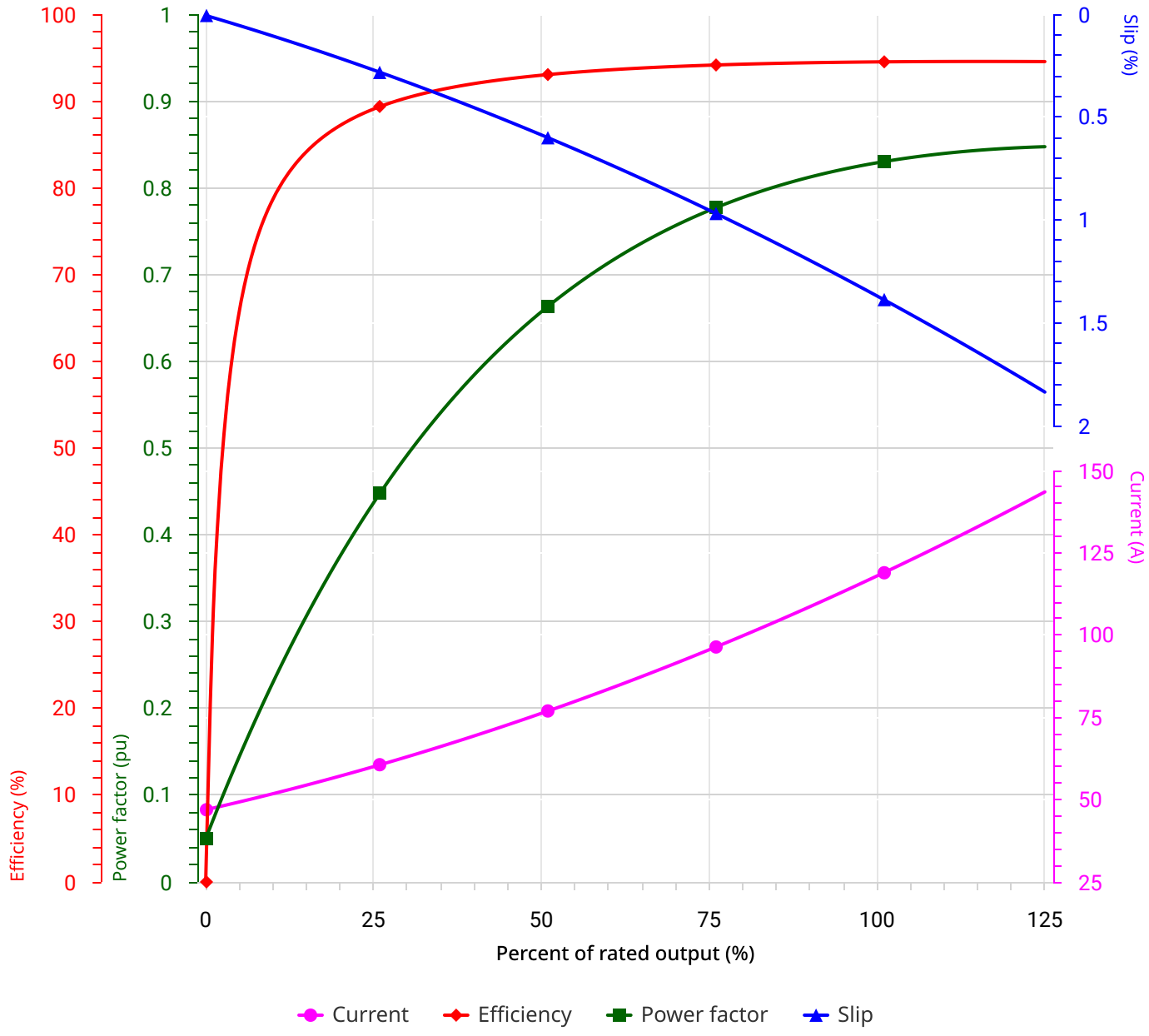
Performed by			
Checked by		Page	Revision
Date	2026/10/30	1/8	0

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	: 11438075



Performance	: 50 HP (37 kW) 208/230/460V 60Hz 4P 324/6TC

Rated current	: 131/118/59.2 A	Moment of inertia (J)	: 0.3861 kgm²
LRC	: 6.2 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 20.4 kgfm	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

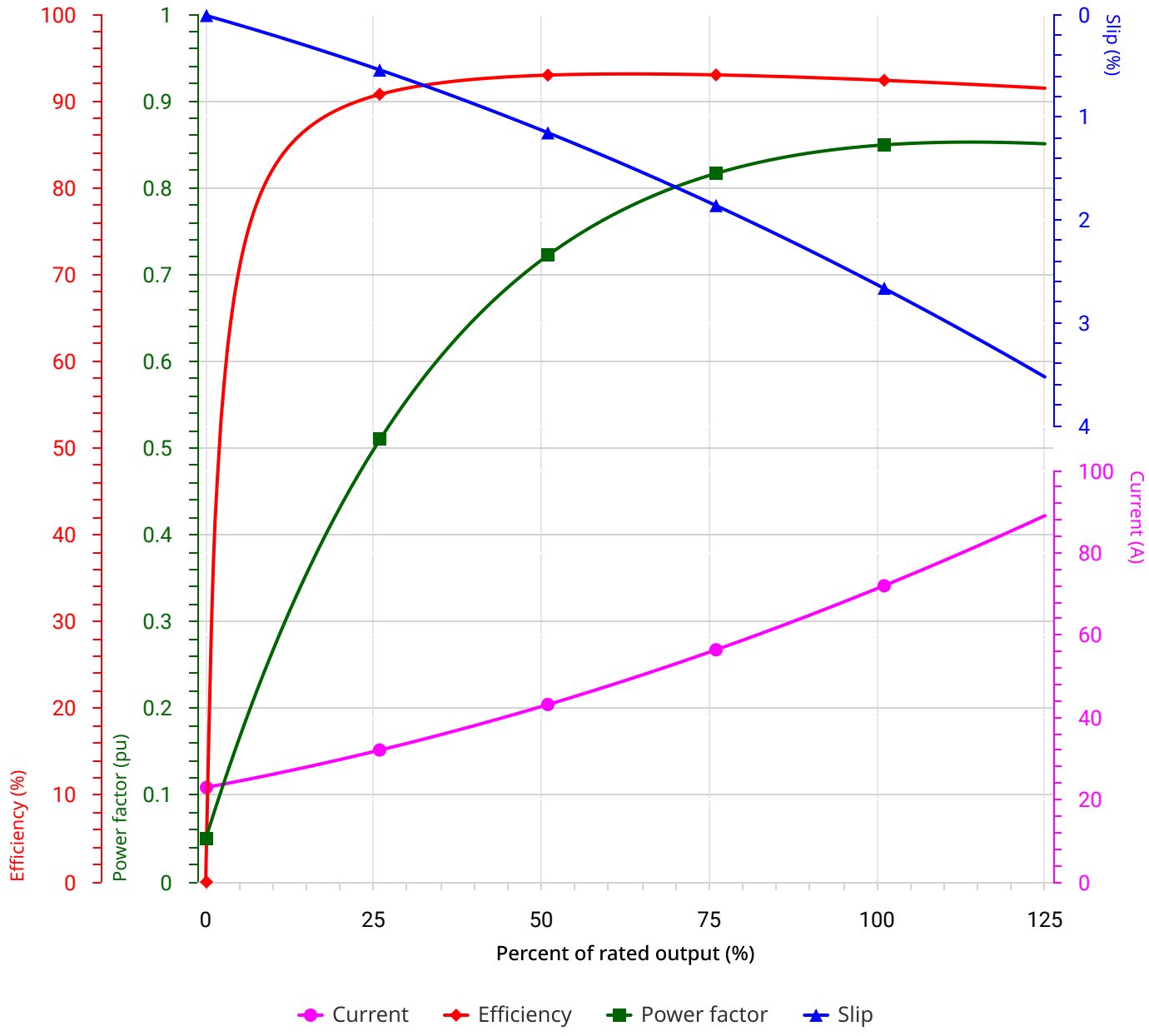
Performed by				
Checked by			Page	Revision
Date	2026/10/30		2/8	0

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	: 11438075



Performance	: 50 HP (37 kW) 380V 50Hz 4P 324/6TC

Rated current	: 71.6 A	Moment of inertia (J)	: 0.3861 kgm²
LRC	: 5.2 Code E	Duty cycle	: Cont.(S1)
Rated torque	: 24.9 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 1460 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

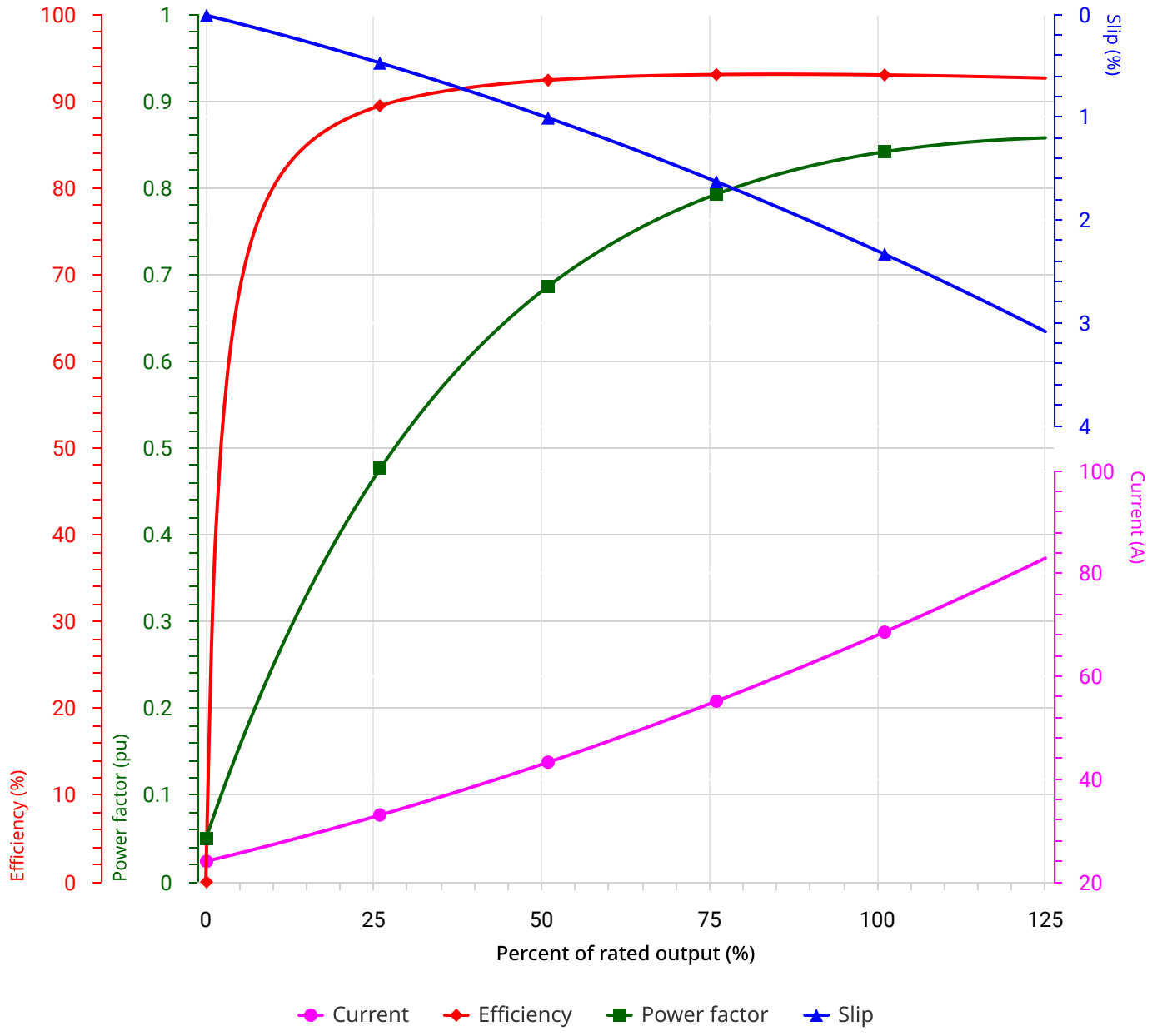
Performed by				
Checked by			Page	Revision
Date	2026/10/30		3/8	0

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	: 11438075



Performance	: 50 HP (37 kW) 400V 50Hz 4P 324/6TC

Rated current	: 68.4 A	Moment of inertia (J)	: 0.3861 kgm²
LRC	: 5.8 Code F	Duty cycle	: Cont.(S1)
Rated torque	: 24.8 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 105 K
Rated speed	: 1465 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

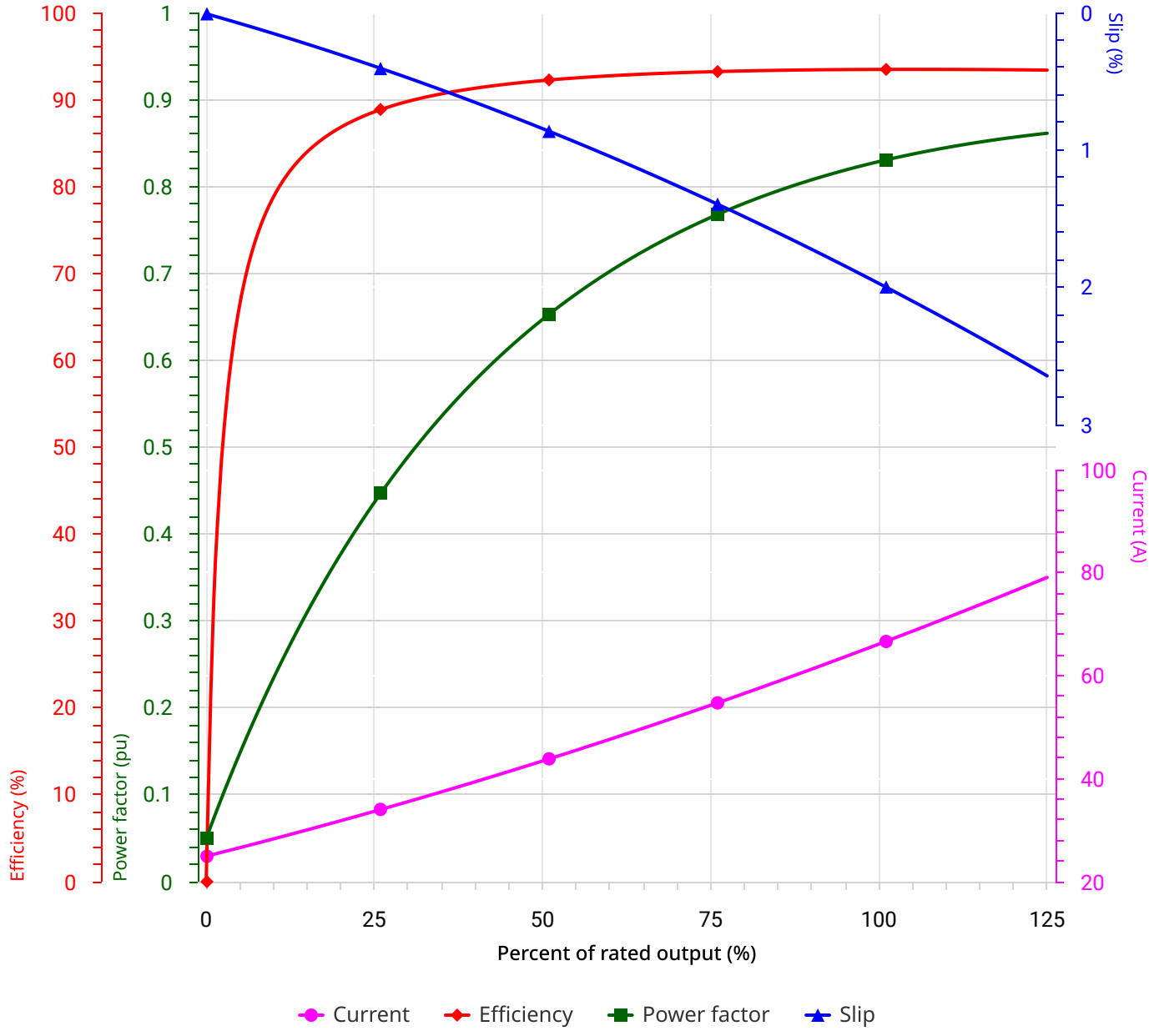
Performed by				
Checked by			Page	Revision
Date	2026/10/30		4/8	0

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	: 11438075



Performance	: 50 HP (37 kW) 415V 50Hz 4P 324/6TC

Rated current	: 66.3 A	Moment of inertia (J)	: 0.3861 kgm²
LRC	: 6.2 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 24.7 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1470 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

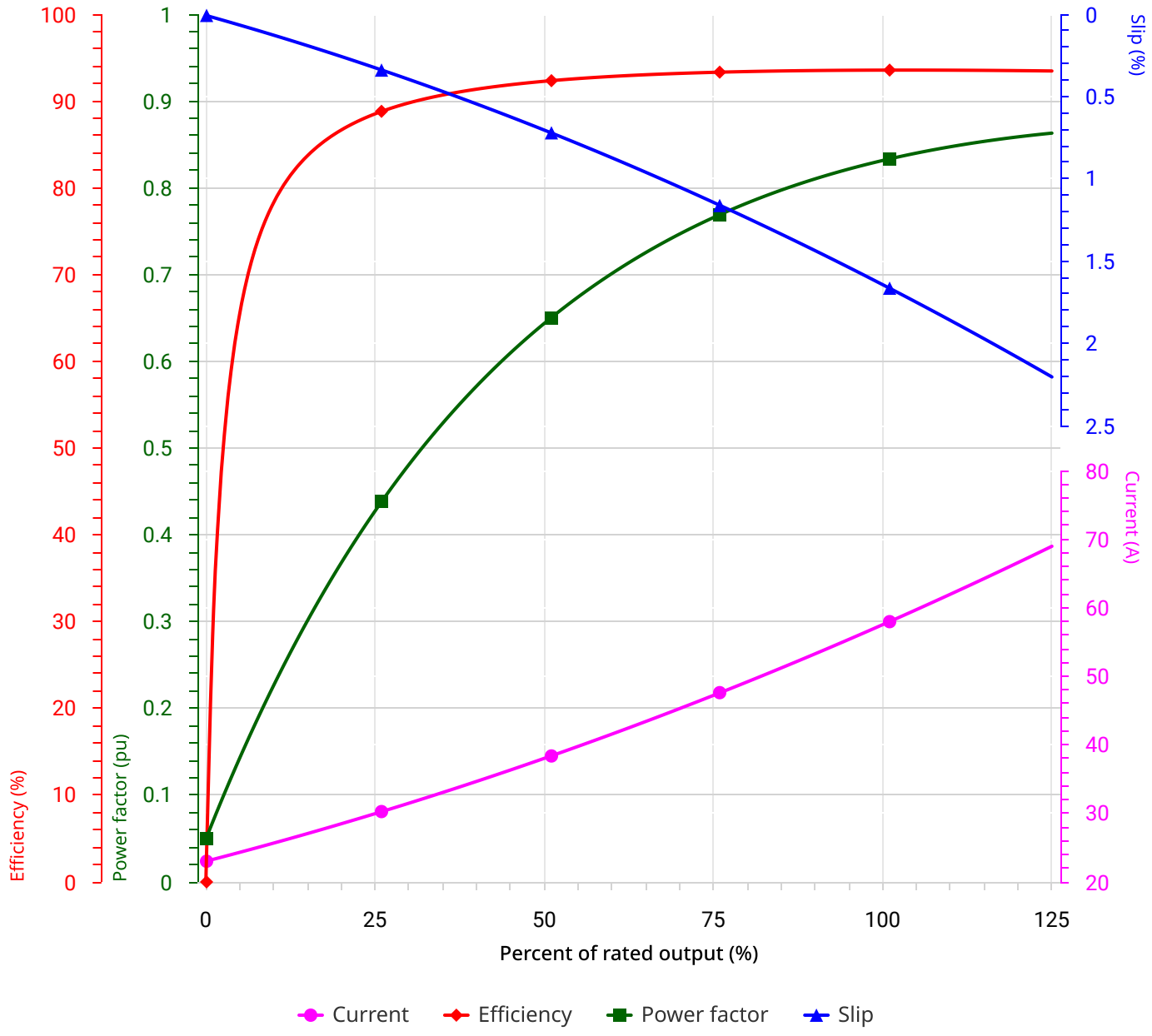
Performed by				
Checked by			Page	Revision
Date	2026/10/30		5/8	0

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	: 11438075



Performance	: 40 HP (30 kW) 380V 50Hz 4P 324/6TC

Rated current	: 58.7 A	Moment of inertia (J)	: 0.3861 kgm²
LRC	: 6.4 Code G	Duty cycle	: Cont.(S1)
Rated torque	: 19.7 kgfm	Insulation class	: F
Locked rotor torque	: 230 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

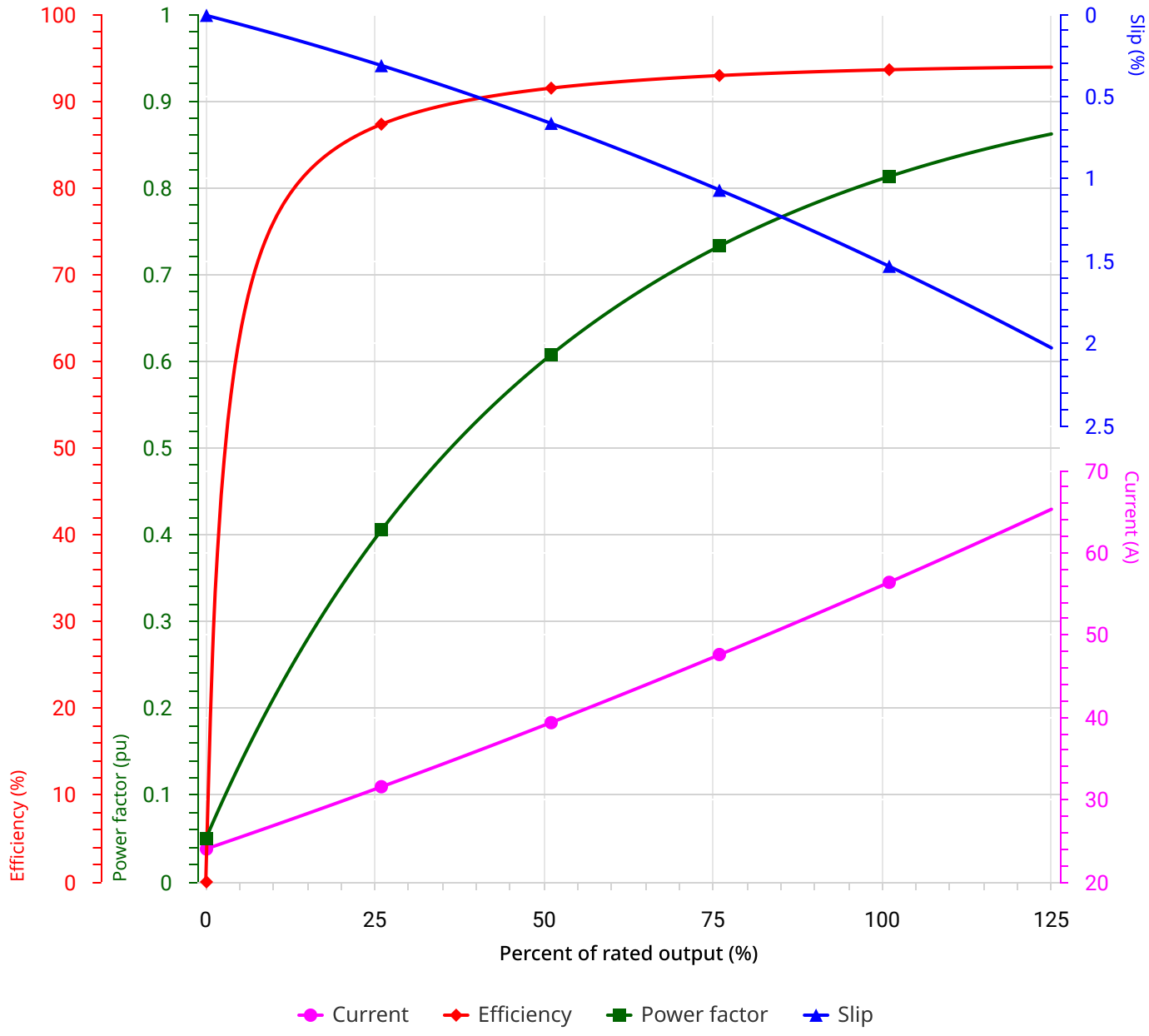
Performed by				
Checked by			Page	Revision
Date	2026/10/30		6/8	0

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	: 11438075



Performance	: 40 HP (30 kW) 400V 50Hz 4P 324/6TC

Rated current	: 57.1 A	Moment of inertia (J)	: 0.3861 kgm²
LRC	: 7.0 Code H	Duty cycle	: Cont.(S1)
Rated torque	: 19.7 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1477 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

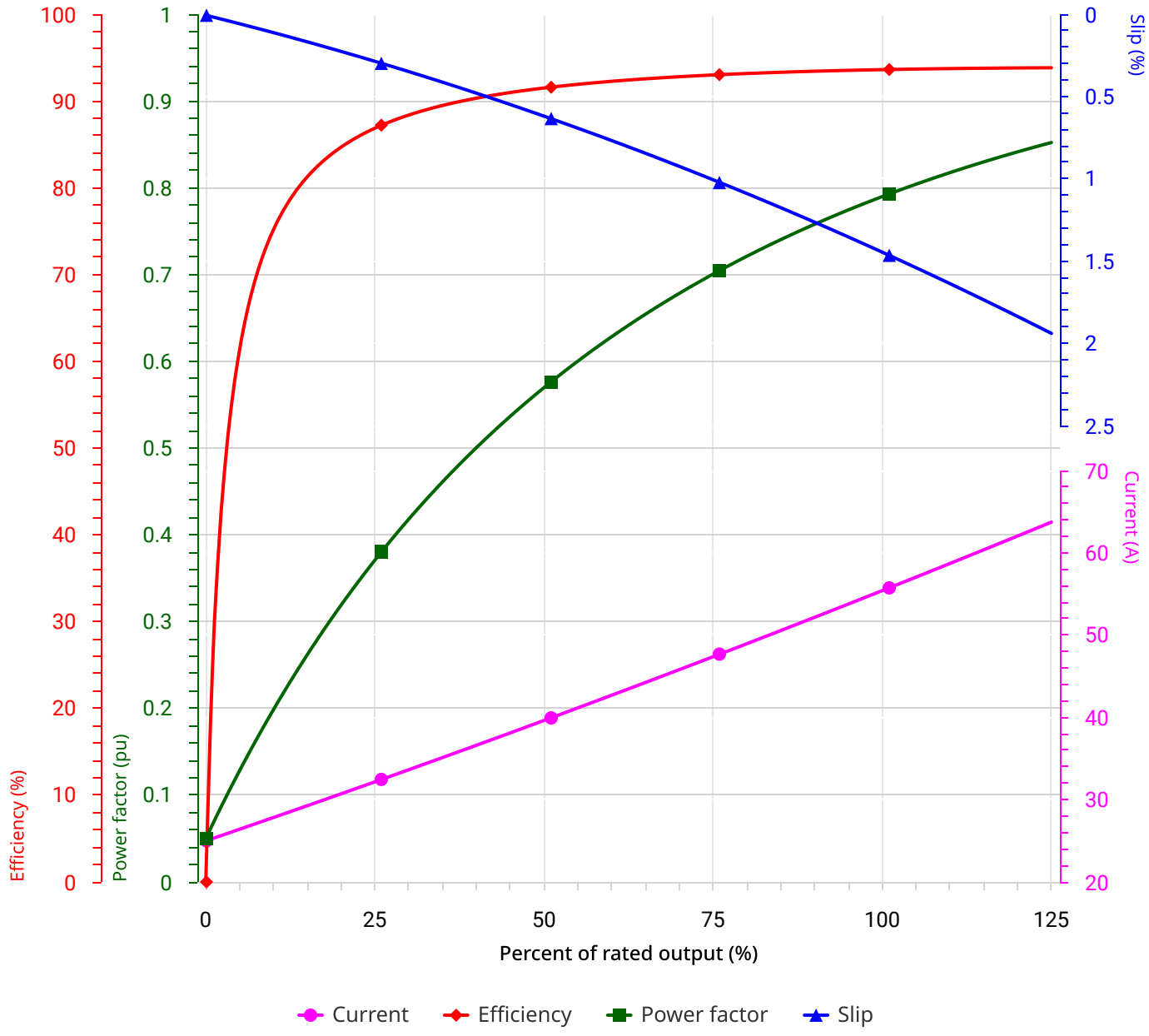
Performed by				
Checked by			Page	Revision
Date	2026/10/30		7/8	0

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	: 11438075



Performance	: 40 HP (30 kW) 415V 50Hz 4P 324/6TC

Rated current	: 56.4 A	Moment of inertia (J)	: 0.3861 kgm²
LRC	: 7.4 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 19.6 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.00
Breakdown torque	: 330 %	Temperature rise	: 80 K
Rated speed	: 1478 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
				2026/10/30

Performed by				
Checked by			Page	Revision
Date	2026/10/30		8/8	0

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