DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer	:
Product line	: W01 - TEFC - Nema Premium Efficiency JM Derating
Product code	: 13180577

Frame	: 254/6JM	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1/B34R(D)
Duty cycle	: S1	Rotation	: Both
Ambient temperature	: -20 °C to +40 °C	Starting method	: Direct On Line
Altitude	: 1000 m	Approx. weight	: 117 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.1113 kgm²
Design	: B		

Output		20 HP (15 kW)	15 HP (11 kW)	15 HP (11 kW)
Poles		4	4	4
Frequency		60 Hz	50 Hz	50 Hz
Rated voltage		230/460 V	190/380 V	220/415 V
Rated current		49.4/24.7 A	44.4/22.2 A	40.7/21.6 A
L. R. Amperes		331/165 A	329/164 A	346/184 A
LRC		6.7 Code H	7.4 Code J	8.5 Code K
No load current		22.2/11.1 A	21.9/10.9 A	24.1/12.8 A
Rated speed		1765 rpm	1470 rpm	1475 rpm
Slip		1.94 %	2.00 %	1.67 %
Rated torque		8.22 kgfm	7.41 kgfm	7.38 kgfm
Locked rotor torque		270 %	270 %	340 %
Breakdown torque		300 %	320 %	390 %
Service factor		1.15	1.15	1.15
Temperature rise		80 K	80 K	80 K
Noise level		68 dB(A)	65 dB(A)	65 dB(A)
Locked rotor time		16 s (hot) 29 s (cold)	20 s (hot) 36 s (cold)	16 s (hot) 29 s (cold)
Efficiency (%)	50%	91.7	91.6	90.5
	75%	92.4	92.2	91.8
	100%	93.0	91.8	91.9
Power Factor	Start	0.51	0.53	0.54
	50%	0.66	0.63	0.55
	75%	0.77	0.75	0.68
	100%	0.82	0.82	0.77
Losses at normative operating points (speed;torque), in percentage of rated output power				
P1 (0,9;1,0)		7.22	8.26	8.45
P2 (0,5;1,0)		5.83	6.67	6.82
P3 (0,25;1,0)		5.41	6.20	6.34
P4 (0,9;0,5)		4.29	4.91	5.03
P5 (0,5;0,5)		2.95	3.37	3.45
P6 (0,5;0,25)		2.29	2.62	2.68
P7 (0,25;0,25)		1.66	1.90	1.94

	Drive end	Non drive end
Bearing type	6309-Z-C3	6208-Z-C3
Lubrication interval	20000 h	20000 h
Lubricant amount	13 g	8 g
Lubricant type	MOBIL POLYREX EM	

Notes:

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

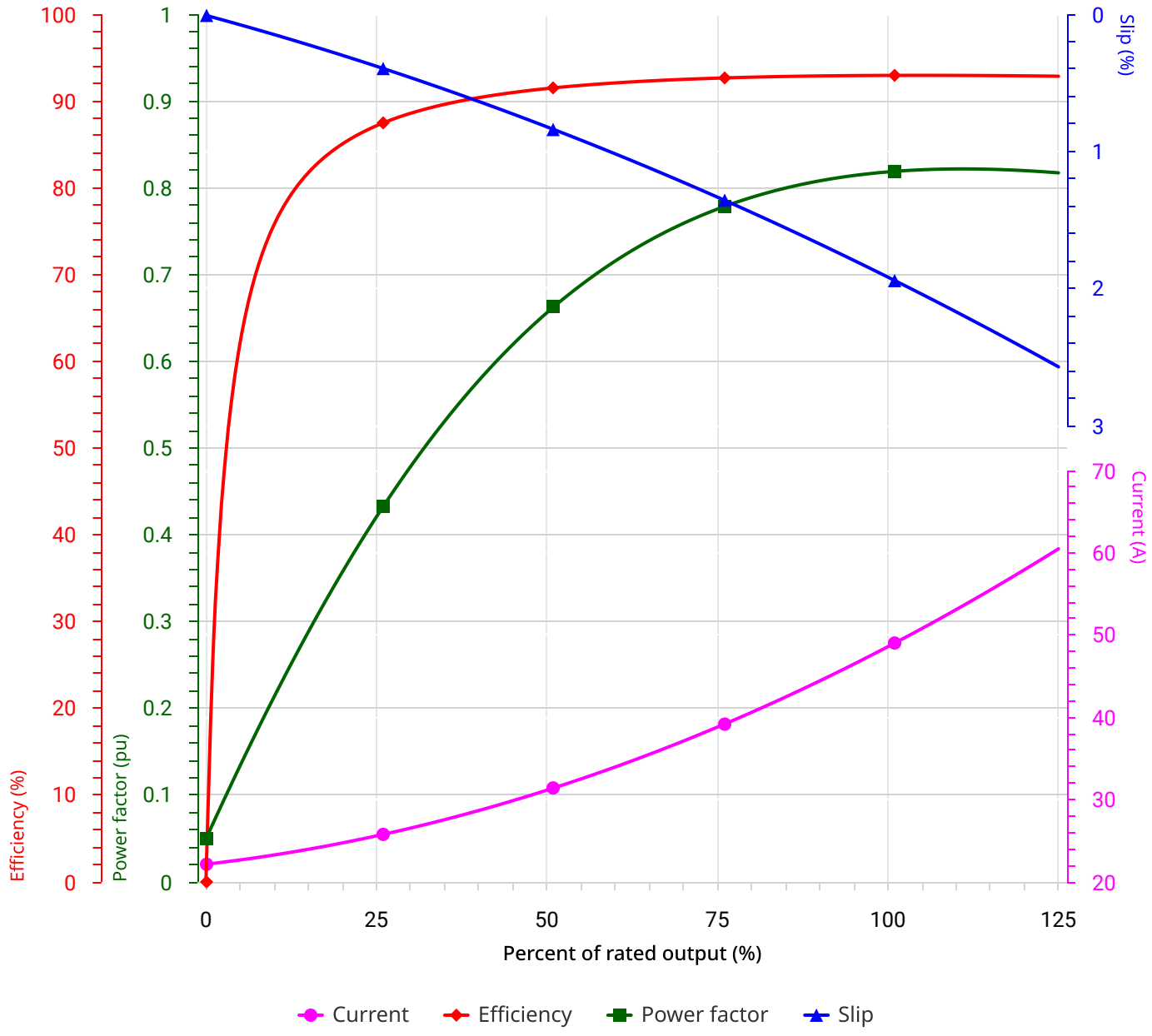
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LOAD PERFORMANCE CURVE

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Customer	:
Product line	: W01 - TEFC - Nema Premium Efficiency JM Derating
Product code	: 13180577



Performance	: 20 HP (15 kW) 208/230/460V 60Hz 4P 254/6JM

Rated current	: 54.6/49.4/24.7 A	Moment of inertia (J)	: 0.1113 kgm²
LRC	: 6.7 Code H	Duty cycle	: Cont.(S1)
Rated torque	: 8.22 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

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				2026/11/12

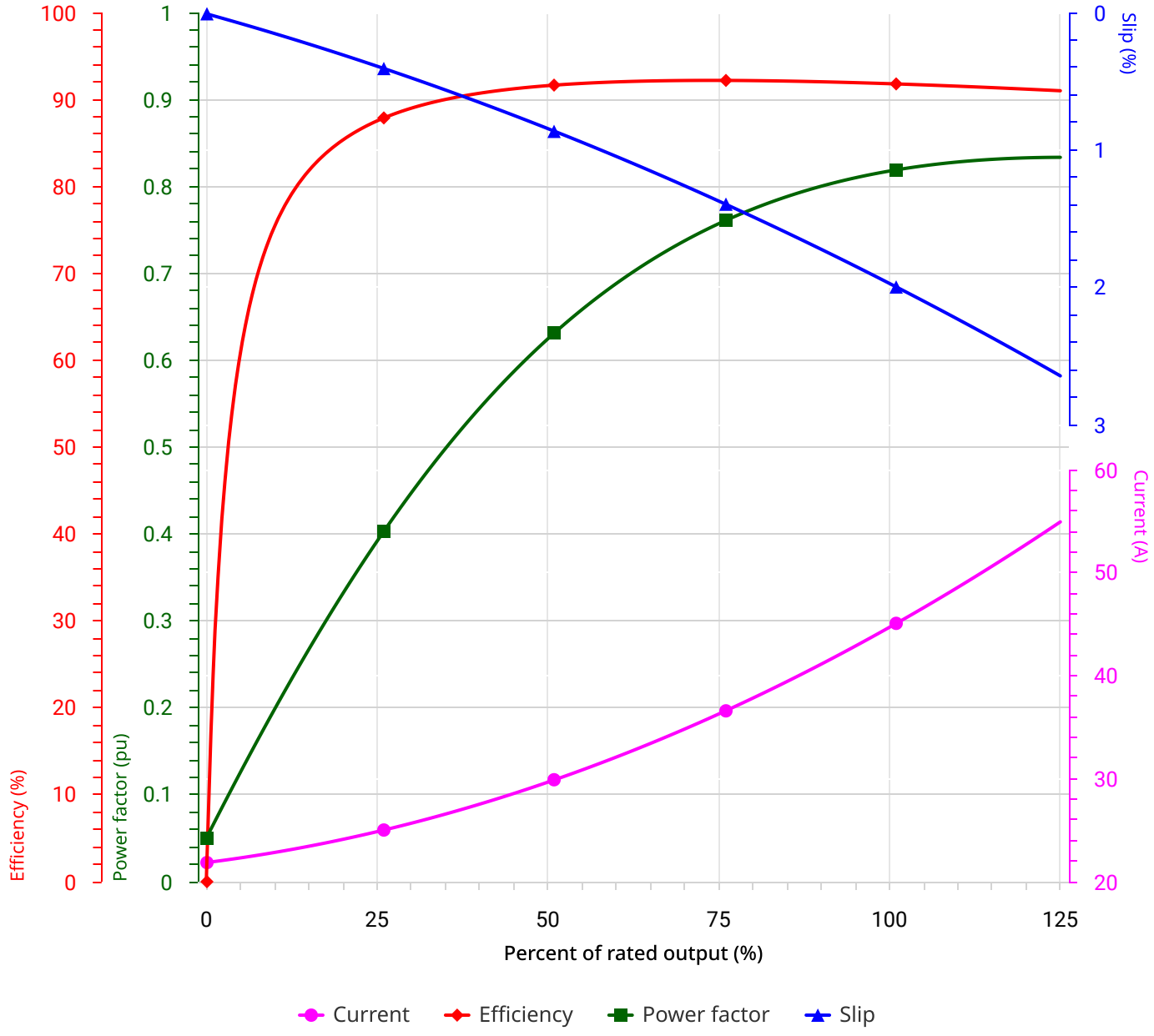
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Three Phase Induction Motor - Squirrel Cage

Customer	:
Product line	: W01 - TEFC - Nema Premium Efficiency JM Derating
Product code	: 13180577



Performance	: 15 HP (11 kW) 190/380V 50Hz 4P 254/6JM

Rated current	: 44.4/22.2 A	Moment of inertia (J)	: 0.1113 kgm²
LRC	: 7.4 Code J	Duty cycle	: Cont.(S1)
Rated torque	: 7.41 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: B

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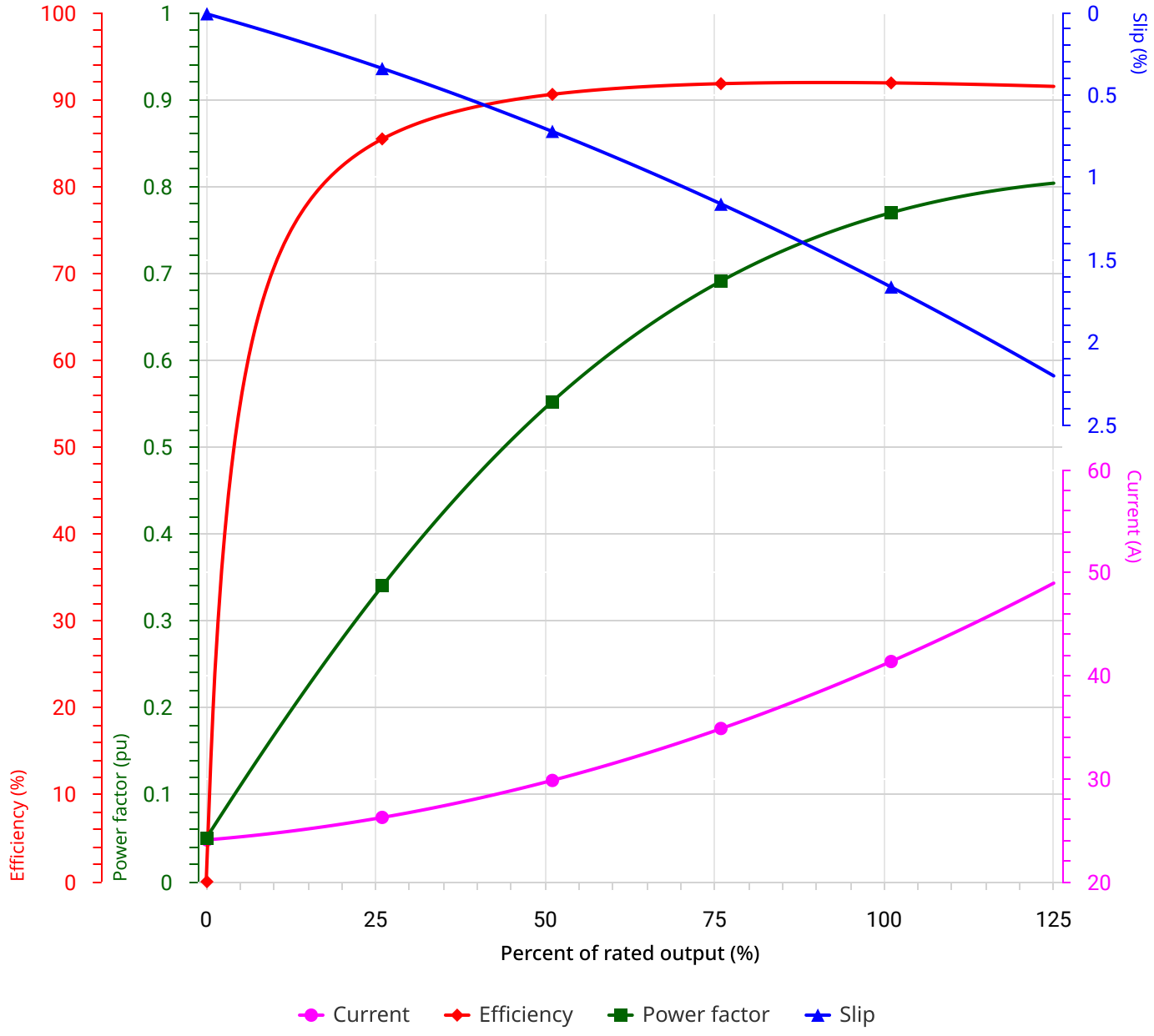
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Three Phase Induction Motor - Squirrel Cage

Customer	:
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Product code	: 13180577



Performance	: 15 HP (11 kW) 220/415V 50Hz 4P 254/6JM

Rated current	: 40.7/21.6 A	Moment of inertia (J)	: 0.1113 kgm²
LRC	: 8.5 Code K	Duty cycle	: Cont.(S1)
Rated torque	: 7.38 kgfm	Insulation class	: F
Locked rotor torque	: 340 %	Service factor	: 1.15
Breakdown torque	: 390 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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