

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919906

Frame	: 213/5T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 85.8 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0636 kgm ²
Design	: B		

Output [HP]	10	7.5	7.5	7.5	10	10	10
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	12.4	11.2	11.0	10.9	15.0	14.2	13.8
L. R. Amperes [A]	79.4	75.0	78.1	81.7	76.5	79.5	82.8
LRC [A]	6.4x(Code H)	6.7x(Code H)	7.1x(Code J)	7.5x(Code K)	5.1x(Code G)	5.6x(Code G)	6.0x(Code H)
No load current [A]	5.65	5.60	6.00	6.35	5.60	6.00	6.35
Rated speed [RPM]	1765	1465	1470	1470	1450	1455	1460
Slip [%]	1.94	2.33	2.00	2.00	3.33	3.00	2.67
Rated torque [kgfm]	4.11	3.70	3.69	3.69	5.01	4.99	4.97
Locked rotor torque [%]	200	200	240	260	150	180	190
Breakdown torque [%]	295	300	340	360	220	250	270
Service factor	1.25	1.15	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K						
Locked rotor time	30s (cold) 17s (hot)	25s (cold) 14s (hot)					
Noise level ²	58.0 dB(A)	56.0 dB(A)					
Efficiency (%)	25%						
	50%	91.0	90.0	89.2	88.7	90.3	90.3
	75%	91.7	90.0	89.9	89.8	90.2	90.2
	100%	91.7	89.8	90.1	90.3	88.5	89.5
Power Factor	25%						
	50%	0.66	0.62	0.58	0.55	0.73	0.69
	75%	0.77	0.76	0.73	0.70	0.82	0.80
	100%	0.83	0.83	0.80	0.78	0.86	0.84

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	8.8	8.8	8.8	8.8	8.8	8.8
	P2 (0,5;1,0)	7.3	7.3	7.3	7.3	7.3	7.3
	P3 (0,25;1,0)	7.0	7.0	7.0	7.0	7.0	7.0
	P4 (0,9;0,5)	4.6	4.6	4.6	4.6	4.6	4.6
	P5 (0,5;0,5)	3.2	3.2	3.2	3.2	3.2	3.2
	P6 (0,5;0,25)	2.3	2.3	2.3	2.3	2.3	2.3
	P7 (0,25;0,25)	1.6	1.6	1.6	1.6	1.6	1.6

Bearing type	: Drive end 6308 C3 Non drive end 6207 C3	Foundation loads Max. traction : 205 kgf Max. compression : 291 kgf
Sealing	: Taconite Labyrinth Taconite Labyrinth	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 11 g 7 g	
Lubricant type	: Mobil Polyrex EM	

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/10/2024		1 / 9	

DATA SHEET

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Notes

This revision replaces and cancel the previous one, which must be eliminated.

- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	22/10/2024		2 / 9	

LOAD PERFORMANCE CURVE

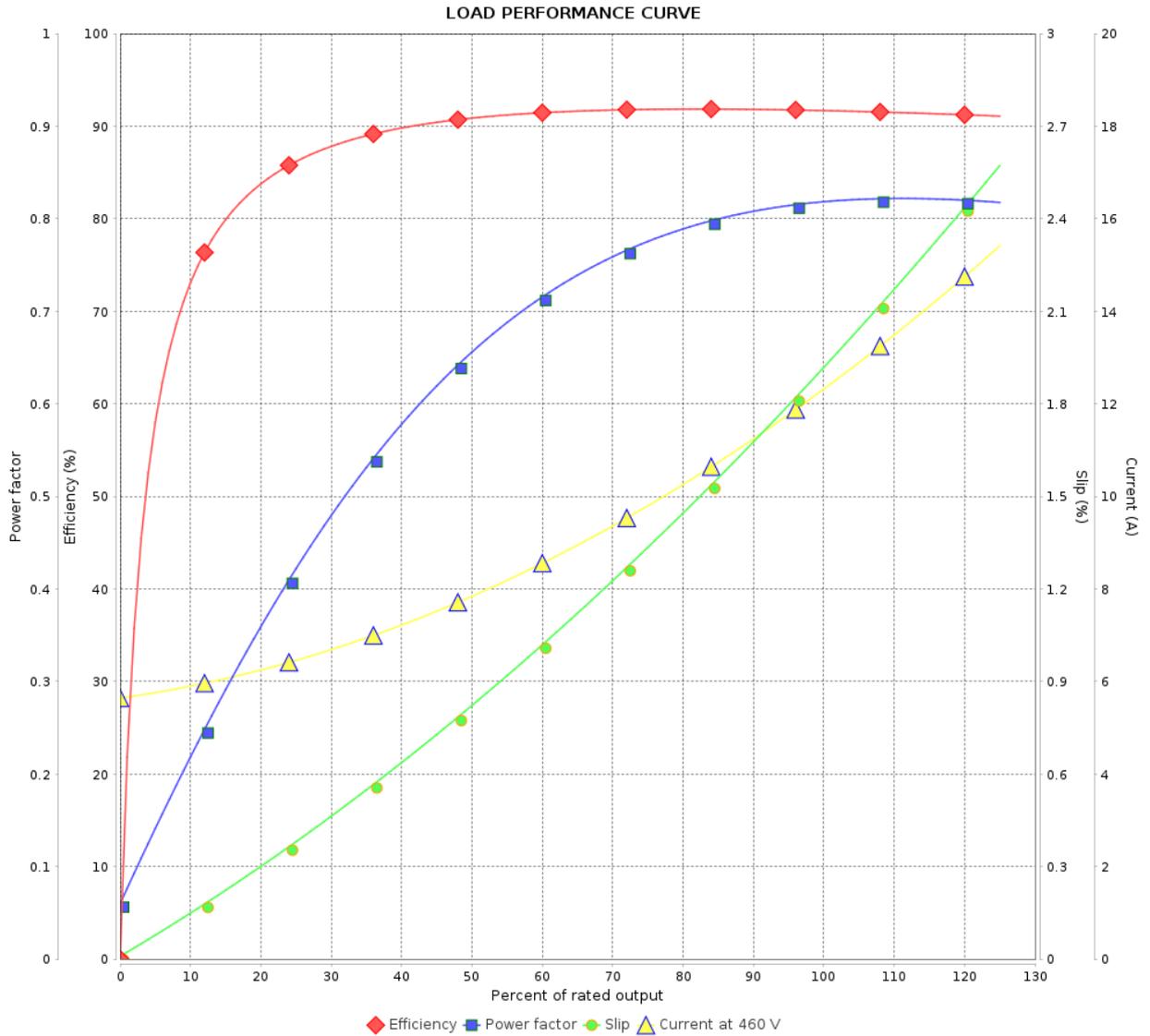
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11919906



Performance : 460 V 60 Hz 4P

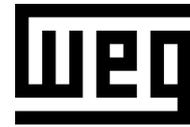
Rated current : 12.4 A
 LRC : 6.4
 Rated torque : 4.11 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 295 %
 Rated speed : 1765 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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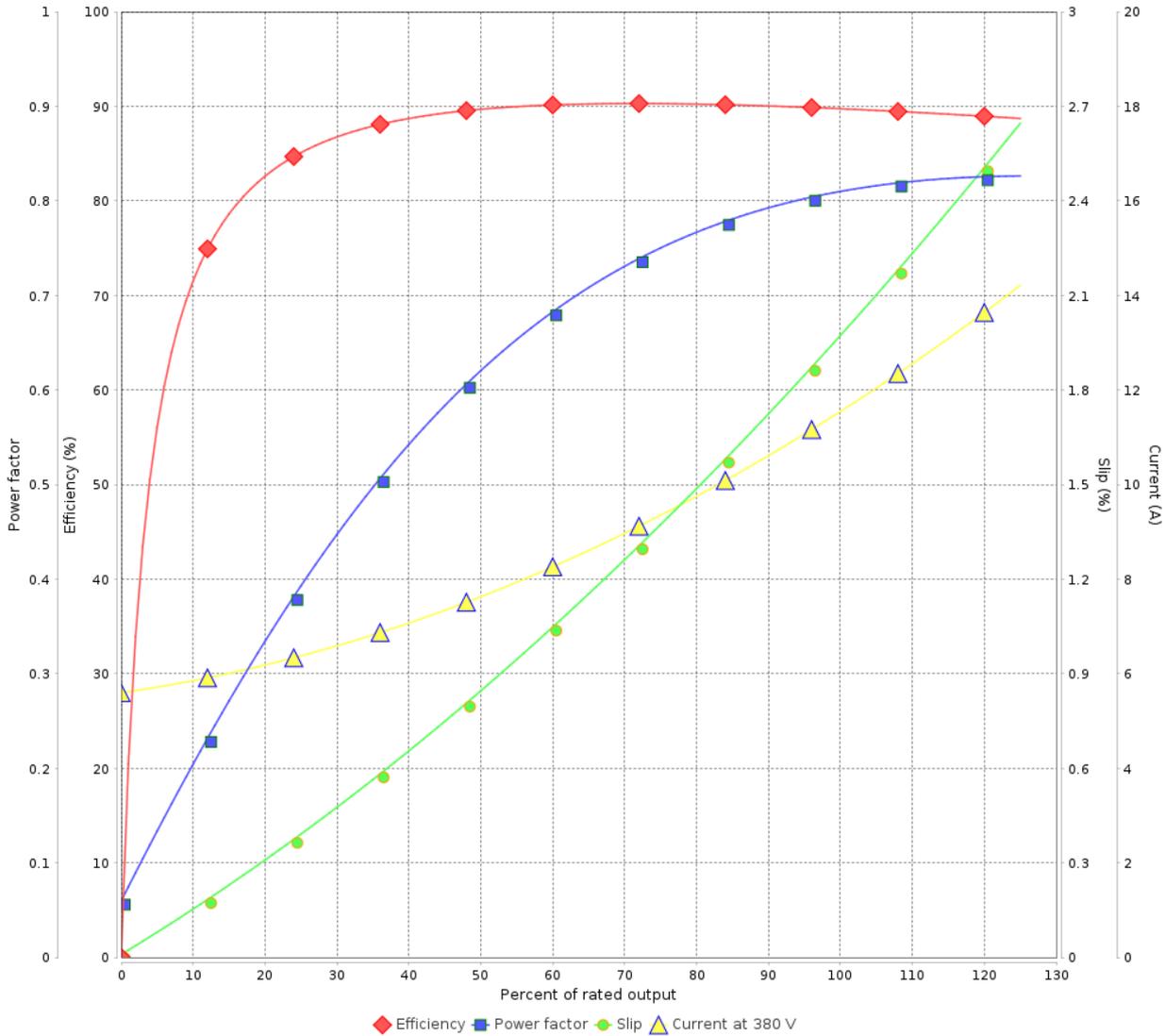
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Performance : 380 V 50 Hz 4P IE3

Rated current	: 11.2 A	Moment of inertia (J)	: 0.0636 kgm ²
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 3.70 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 9	Revision
Checked by				
Date	22/10/2024			

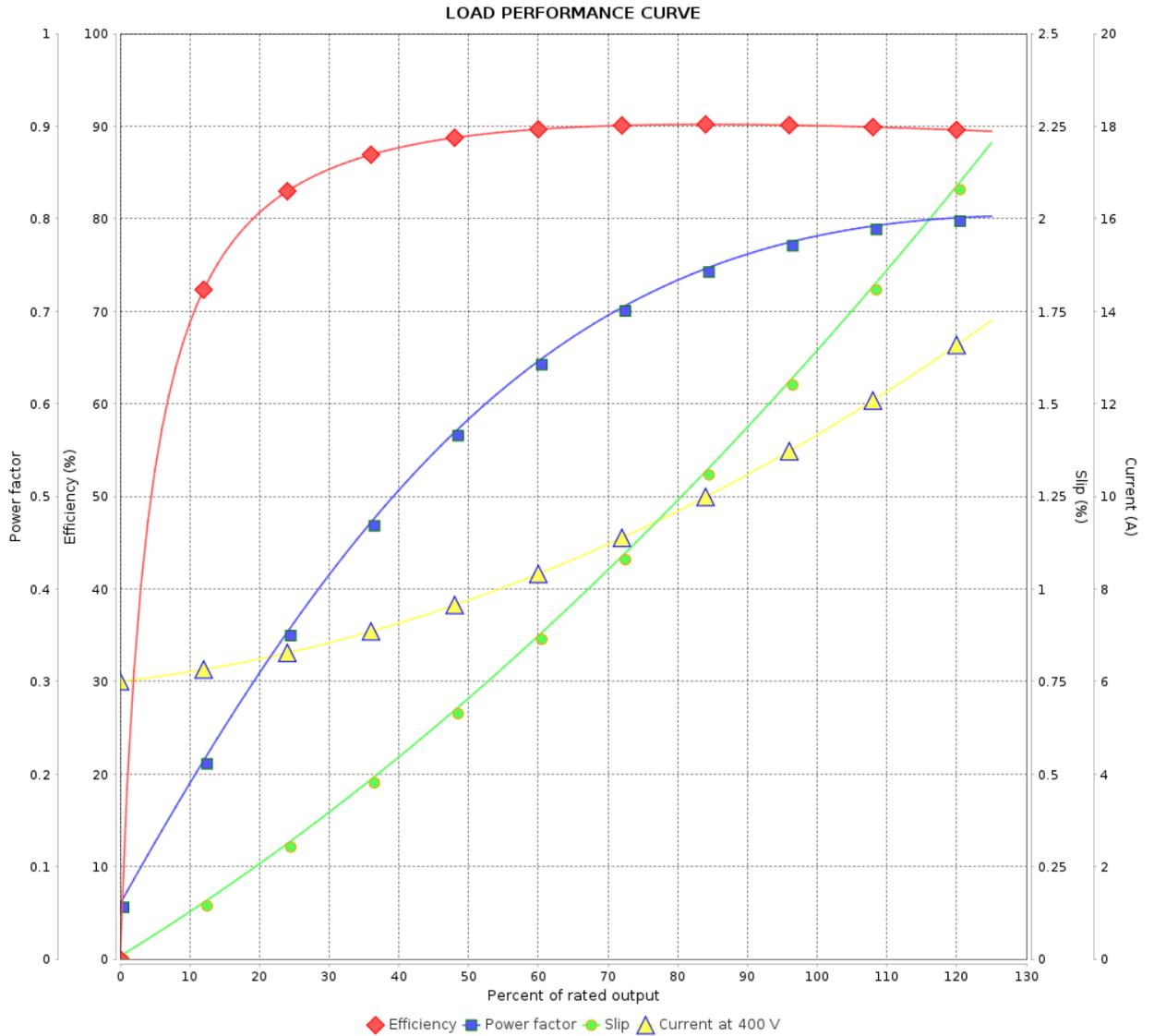
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919906



Performance : 400 V 50 Hz 4P IE3

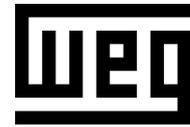
Rated current : 11.0 A
 LRC : 7.1
 Rated torque : 3.69 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 340 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

LOAD PERFORMANCE CURVE

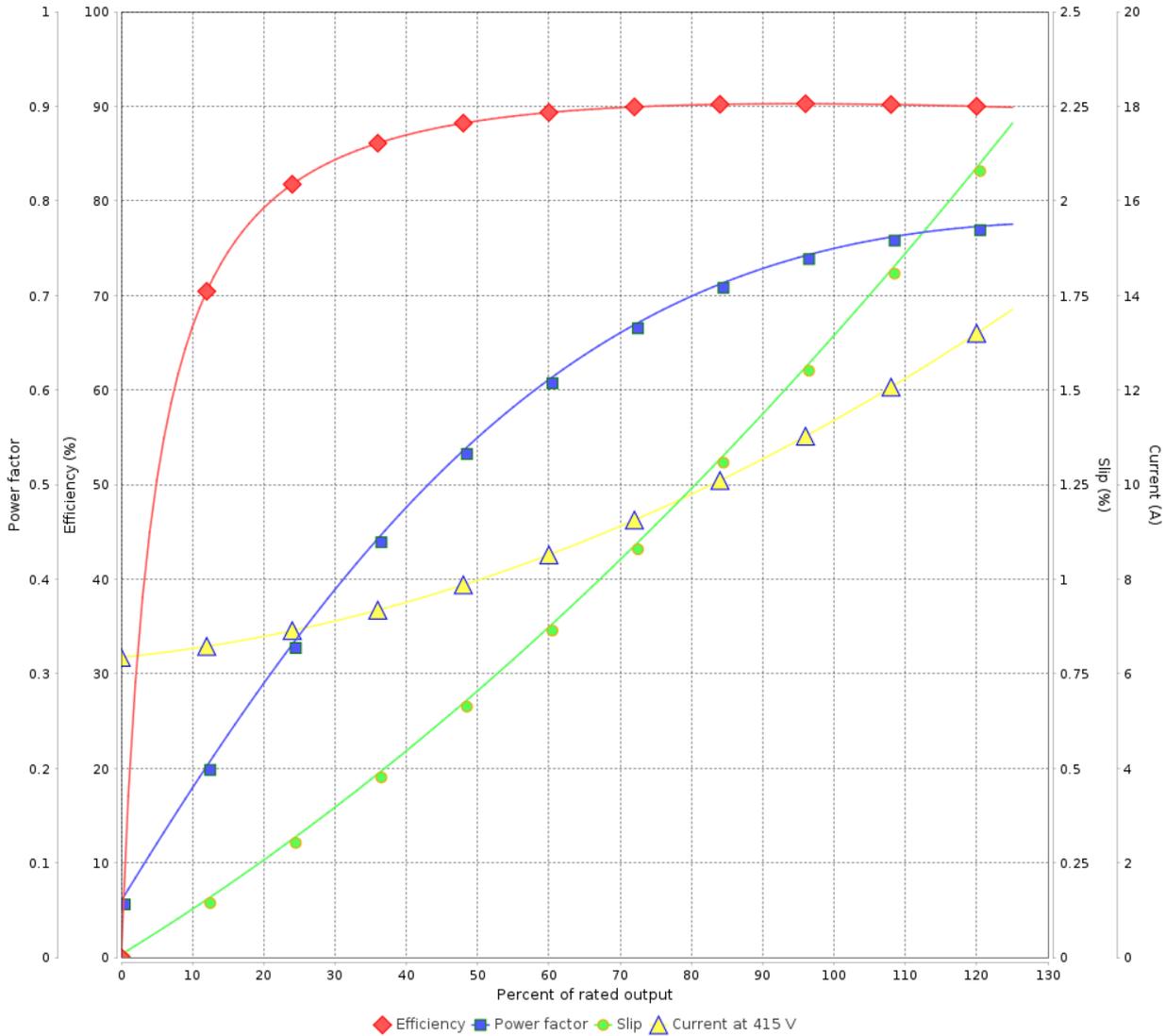
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919906

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Performance : 415 V 50 Hz 4P IE3

Rated current	: 10.9 A	Moment of inertia (J)	: 0.0636 kgm ²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 3.69 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.15
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 9	Revision
Checked by				
Date	22/10/2024			

LOAD PERFORMANCE CURVE

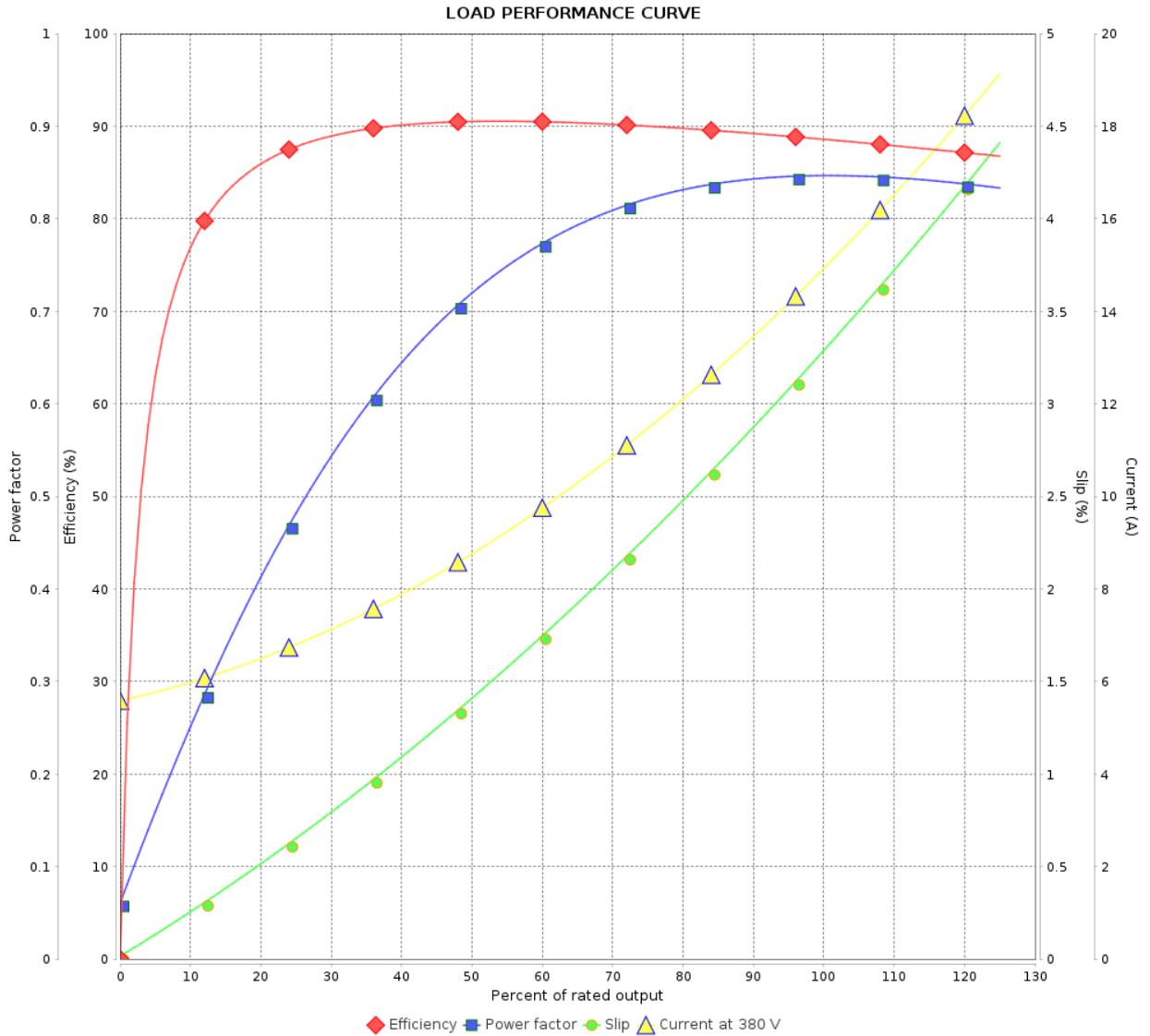
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase

Product code : 11919906



Performance : 380 V 50 Hz 4P IE1

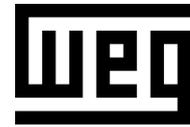
Rated current : 15.0 A
 LRC : 5.1
 Rated torque : 5.01 kgfm
 Locked rotor torque : 150 %
 Breakdown torque : 220 %
 Rated speed : 1450 rpm

Moment of inertia (J) : 0.0636 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

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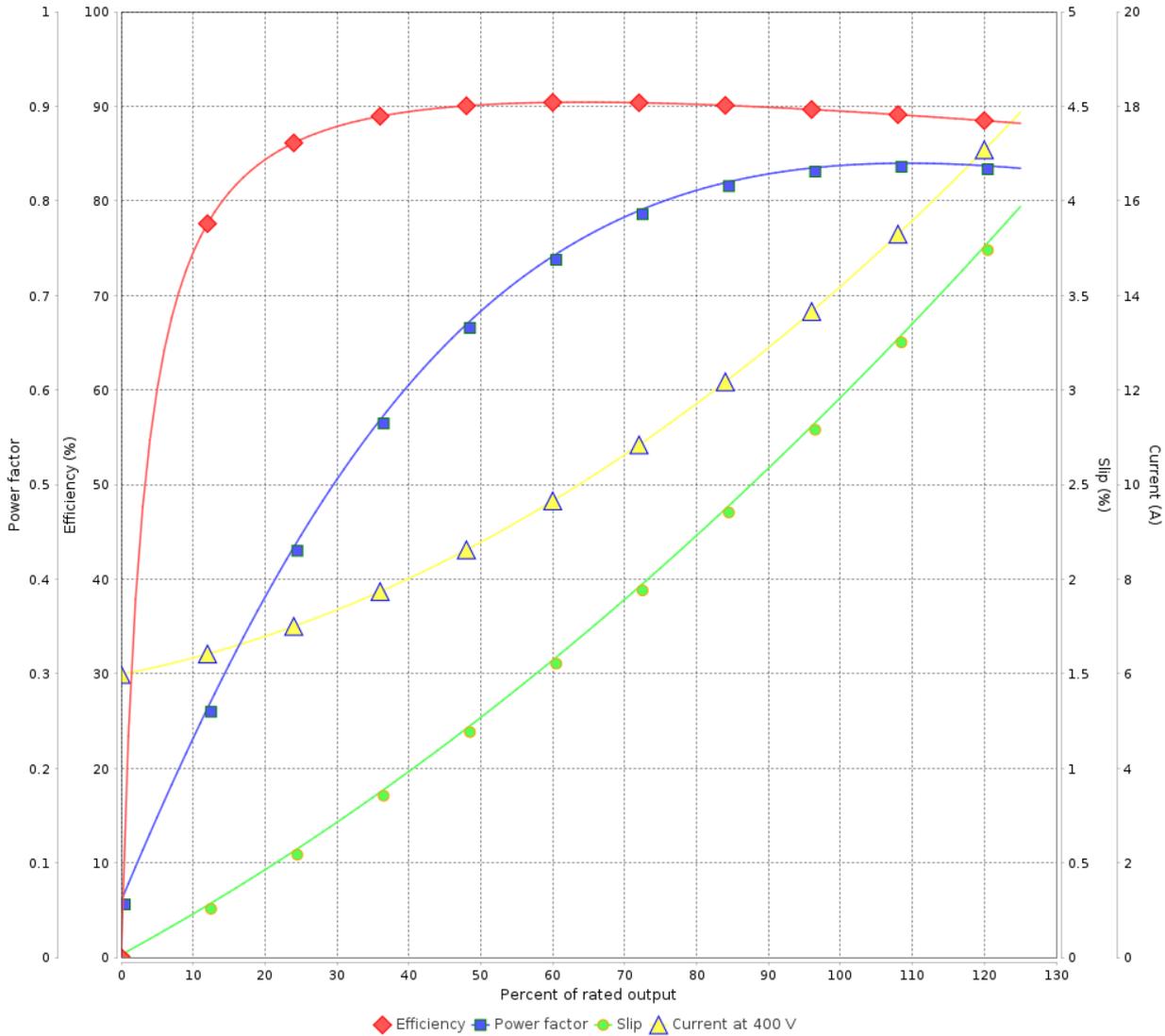
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11919906

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Performance : 400 V 50 Hz 4P IE2

Rated current	: 14.2 A	Moment of inertia (J)	: 0.0636 kgm ²
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 4.99 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 9	Revision
Checked by				
Date	22/10/2024			

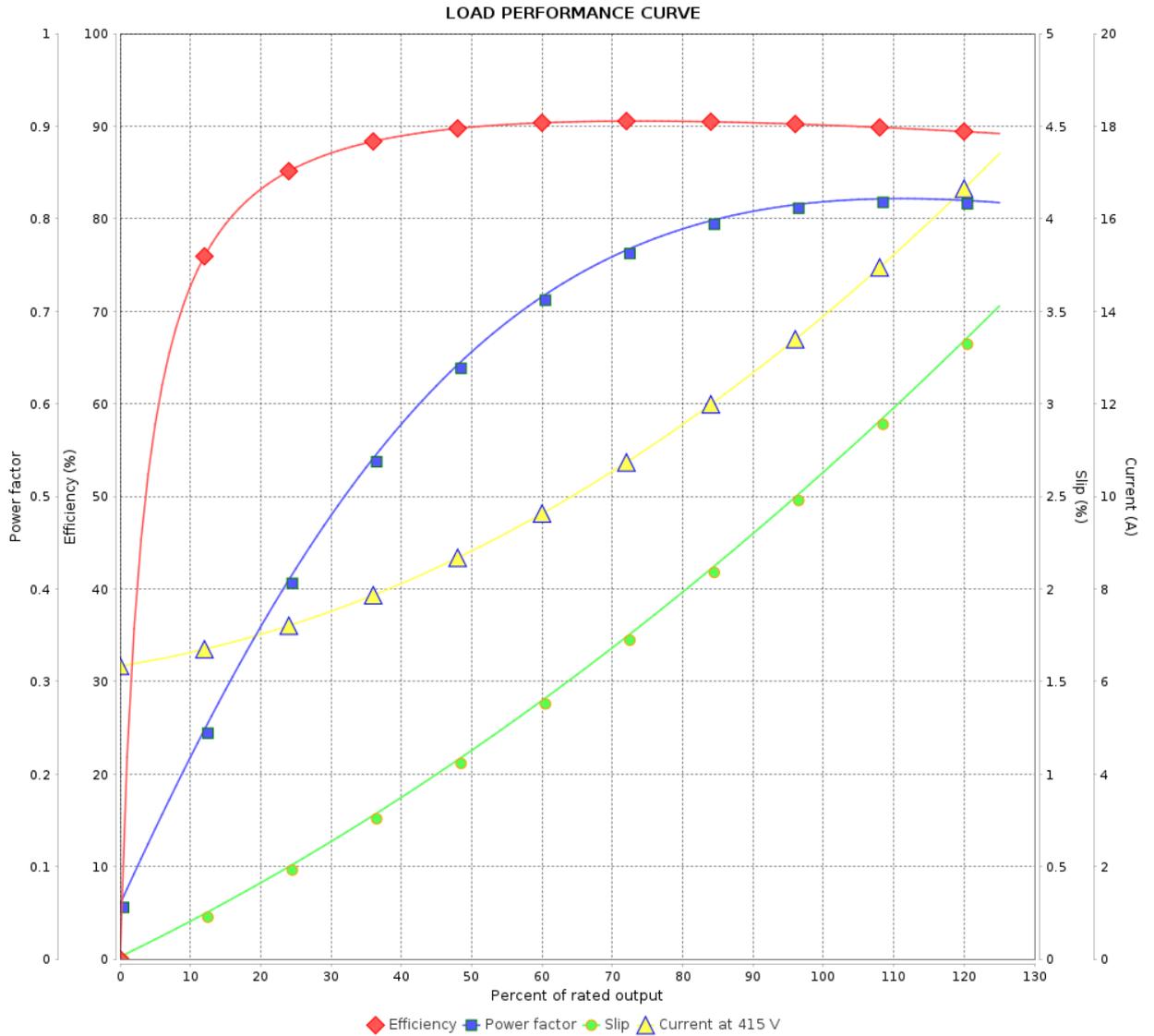
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Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 415 V 50 Hz 4P IE2

Rated current	: 13.8 A	Moment of inertia (J)	: 0.0636 kgm ²
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 4.97 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.15
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1460 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 9 / 9	Revision
Checked by				
Date	22/10/2024			

