

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11944847

Frame : 444/5T	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 : 0.0 kg
Protection degree : IP55	Moment of inertia (J) : 2.81 kgm ²
Design : B	

Output [HP]	150	125	125	125	150	150	150
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]	170	167	160	156	205	194	189
L. R. Amperes [A]	1122	1169	1104	1170	1189	1125	1191
LRC [A]	6.6x(Code G)	7.0x(Code G)	6.9x(Code G)	7.5x(Code H)	5.8x(Code F)	5.8x(Code F)	6.3x(Code G)
No load current [A]	56.0	56.0	58.0	62.0	56.0	58.0	62.0
Rated speed [RPM]	1784	1484	1485	1487	1475	1480	1480
Slip [%]	0.89	1.07	1.00	0.87	1.67	1.33	1.33
Rated torque [kgfm]	61.0	61.1	61.1	61.0	73.8	73.6	73.6
Locked rotor torque [%]	200	190	220	229	160	180	190
Breakdown torque [%]	240	240	260	290	200	220	240
Service factor	1.15	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time	39s (cold) 22s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	73.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)	69.0 dB(A)
Efficiency (%)	25%						
	50%	95.4	95.1	95.1	94.8	95.4	95.4
	75%	95.8	95.5	95.5	95.5	95.4	95.4
	100%	95.8	95.3	95.3	95.5	95.0	95.4
Power Factor	25%						
	50%	0.74	0.73	0.70	0.68	0.79	0.74
	75%	0.82	0.83	0.81	0.79	0.85	0.83
	100%	0.85	0.86	0.85	0.84	0.86	0.85

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

Losses (%)	P1 (0,9;1,0)	4.3	4.3	4.3	4.3	4.3	4.3	4.3
	P2 (0,5;1,0)	3.4	3.4	3.4	3.4	3.4	3.4	3.4
	P3 (0,25;1,0)	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	P4 (0,9;0,5)	2.2	2.2	2.2	2.2	2.2	2.2	2.2
	P5 (0,5;0,5)	1.4	1.4	1.4	1.4	1.4	1.4	1.4
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6	0.6	0.6	0.6

Bearing type	: 6319 C3	Non drive end 6316 C3	Foundation loads
Sealing	: Taconite	Taconite	Max. traction : 1544 kgf
	Labyrinth	Labyrinth	Max. compression : 1544 kgf
Lubrication interval	: 8000 h	10000 h	
Lubricant amount	: 45 g	34 g	
Lubricant type	: Mobil Polyrex EM		

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	23/10/2024		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			Page		Revision
Checked by					
Date	23/10/2024				

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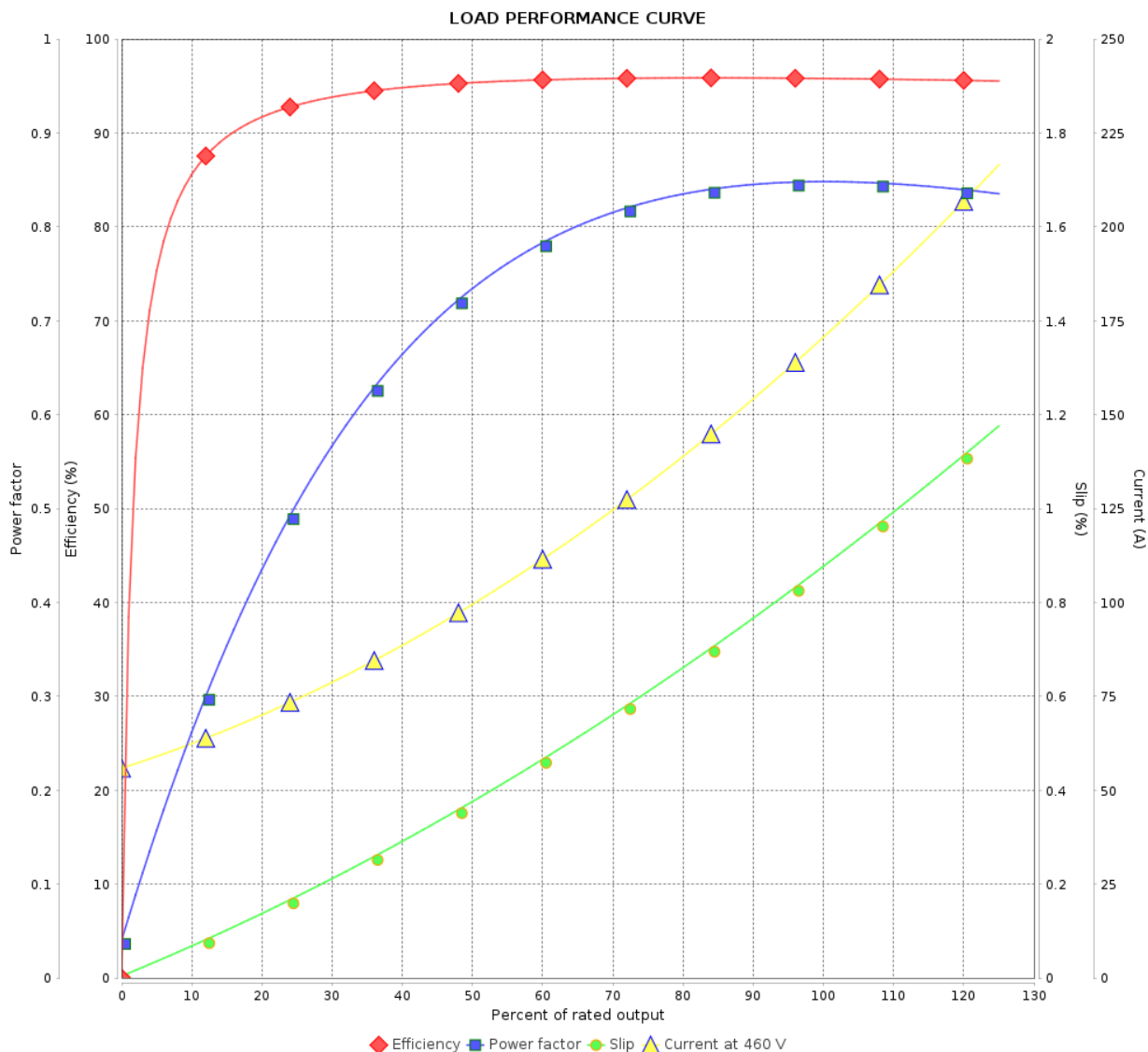
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11944847



Performance : 460 V 60 Hz 4P

Rated current : 170 A
LRC : 6.6
Rated torque : 61.0 kgfm
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1784 rpm

Moment of inertia (J) : 2.81 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 3 / 9Revision		
Checked by				
Date	23/10/2024			

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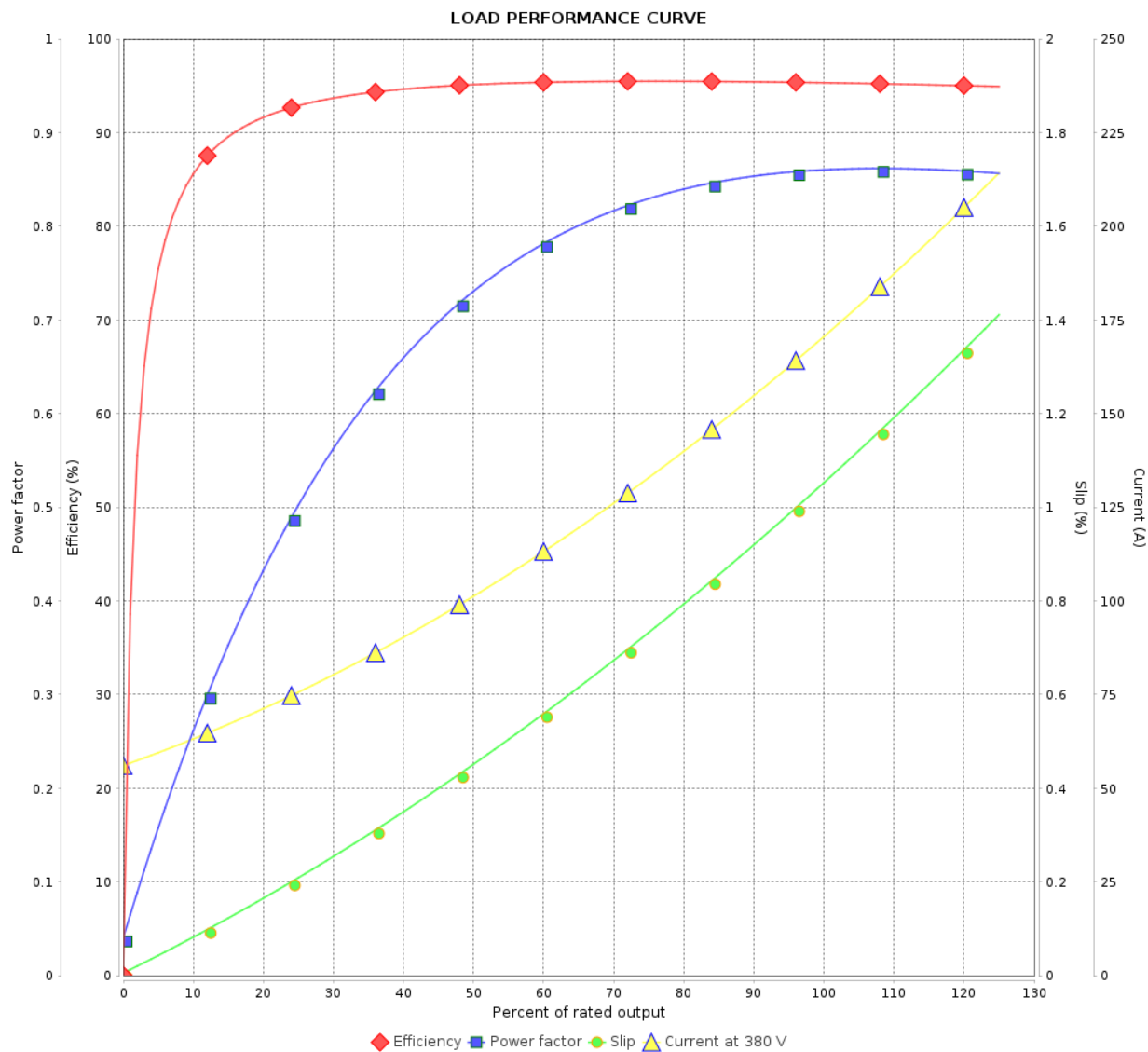
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11944847



Performance : 380 V 50 Hz 4P IE3

Rated current	: 167 A	Moment of inertia (J)	: 2.81 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 61.1 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1484 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by		Page 4 / 9Revision			
Checked by					
Date	23/10/2024				

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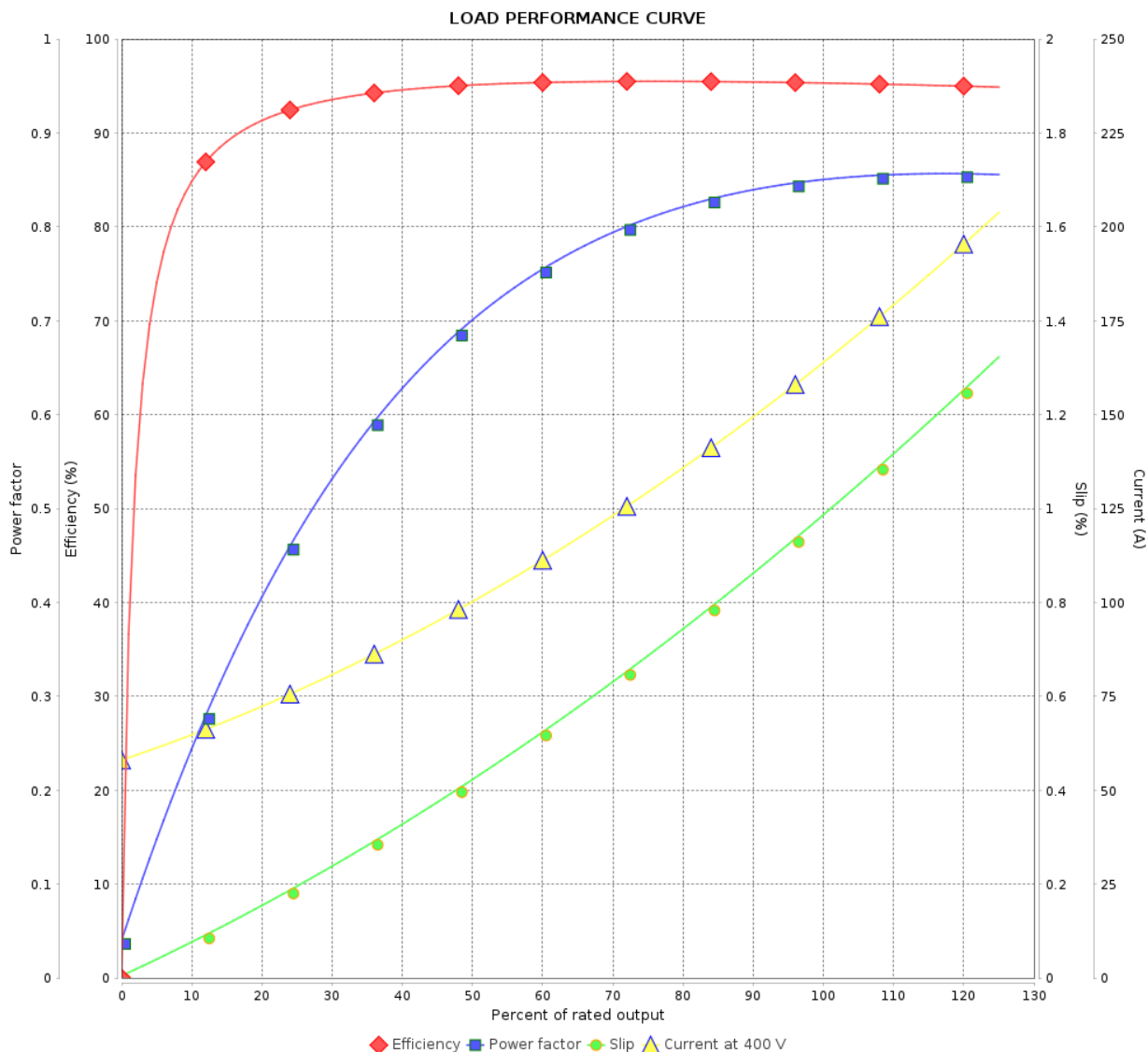
Three Phase Induction Motor - Squirrel Cage



Customer :

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Efficiency Three-Phase

Product code : 11944847



Performance : 400 V 50 Hz 4P IE3

Rated current : 160 A
LRC : 6.9
Rated torque : 61.1 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1485 rpm

Moment of inertia (J) : 2.81 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 9 Revision		
Checked by				
Date	23/10/2024			

LOAD PERFORMANCE CURVE

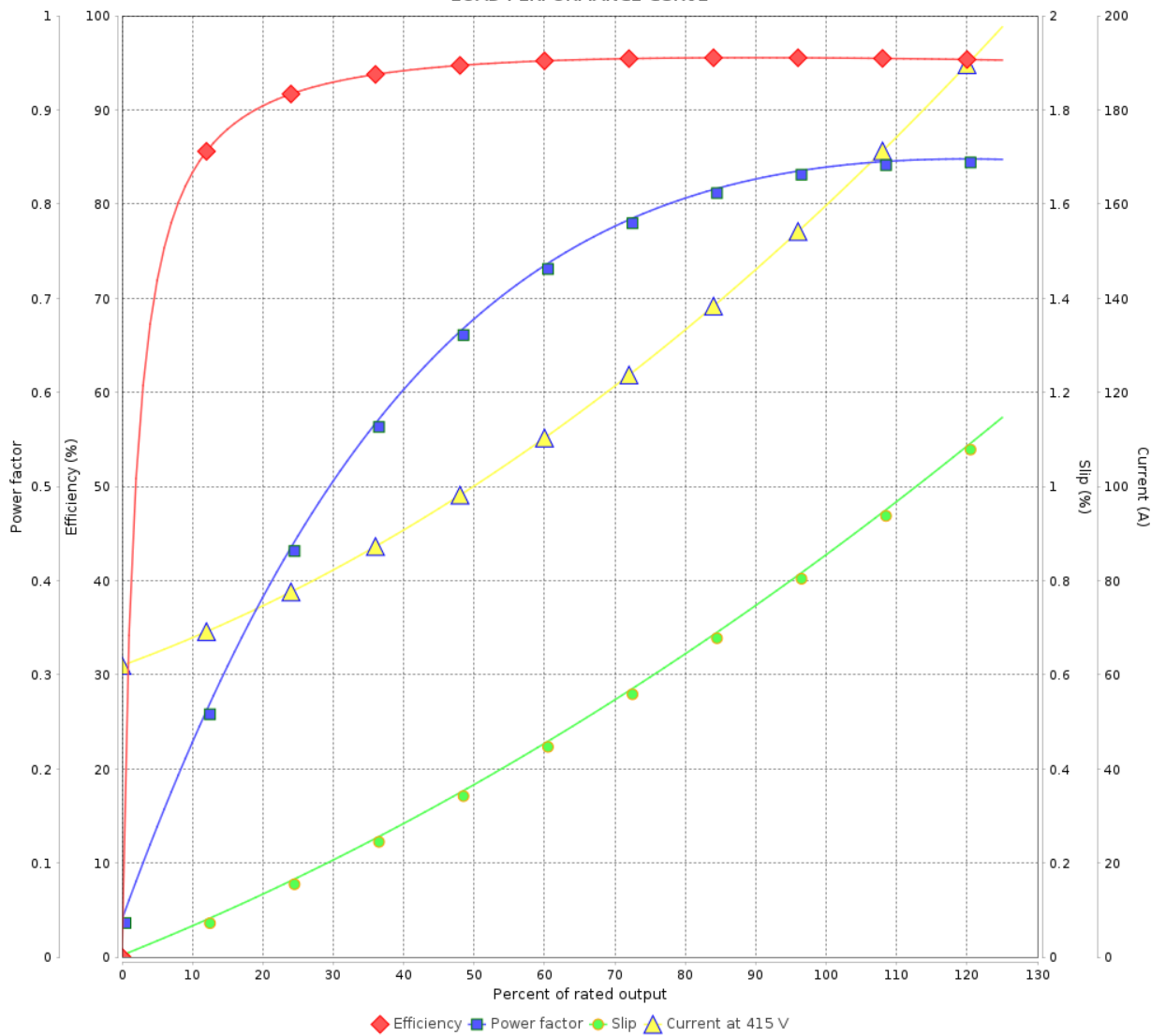
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11944847

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Performance : 415 V 50 Hz 4P IE3			
Rated current	: 156 A	Moment of inertia (J)	: 2.81 kgm ²
LRC	: 7.5	Duty cycle	: Cont.(S1)
Rated torque	: 61.0 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1487 rpm	Design	: B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 6 / 9	Revision
Checked by					
Date	23/10/2024				

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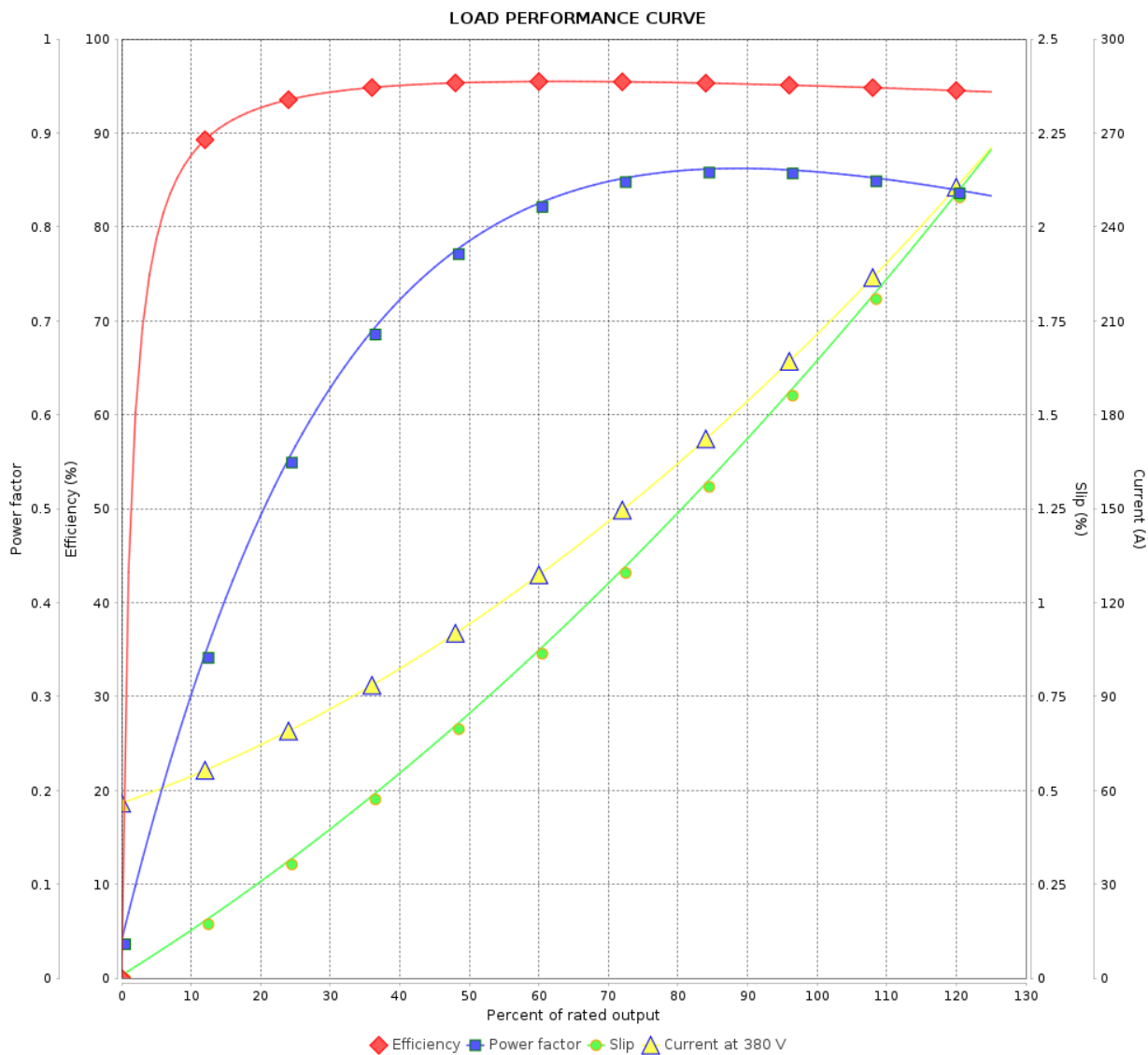
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 11944847



Performance : 380 V 50 Hz 4P IE2

Rated current : 205 A
LRC : 5.8
Rated torque : 73.8 kgfm
Locked rotor torque : 160 %
Breakdown torque : 200 %
Rated speed : 1475 rpm

Moment of inertia (J) : 2.81 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 7 / 9	Revision
Checked by					
Date	23/10/2024				

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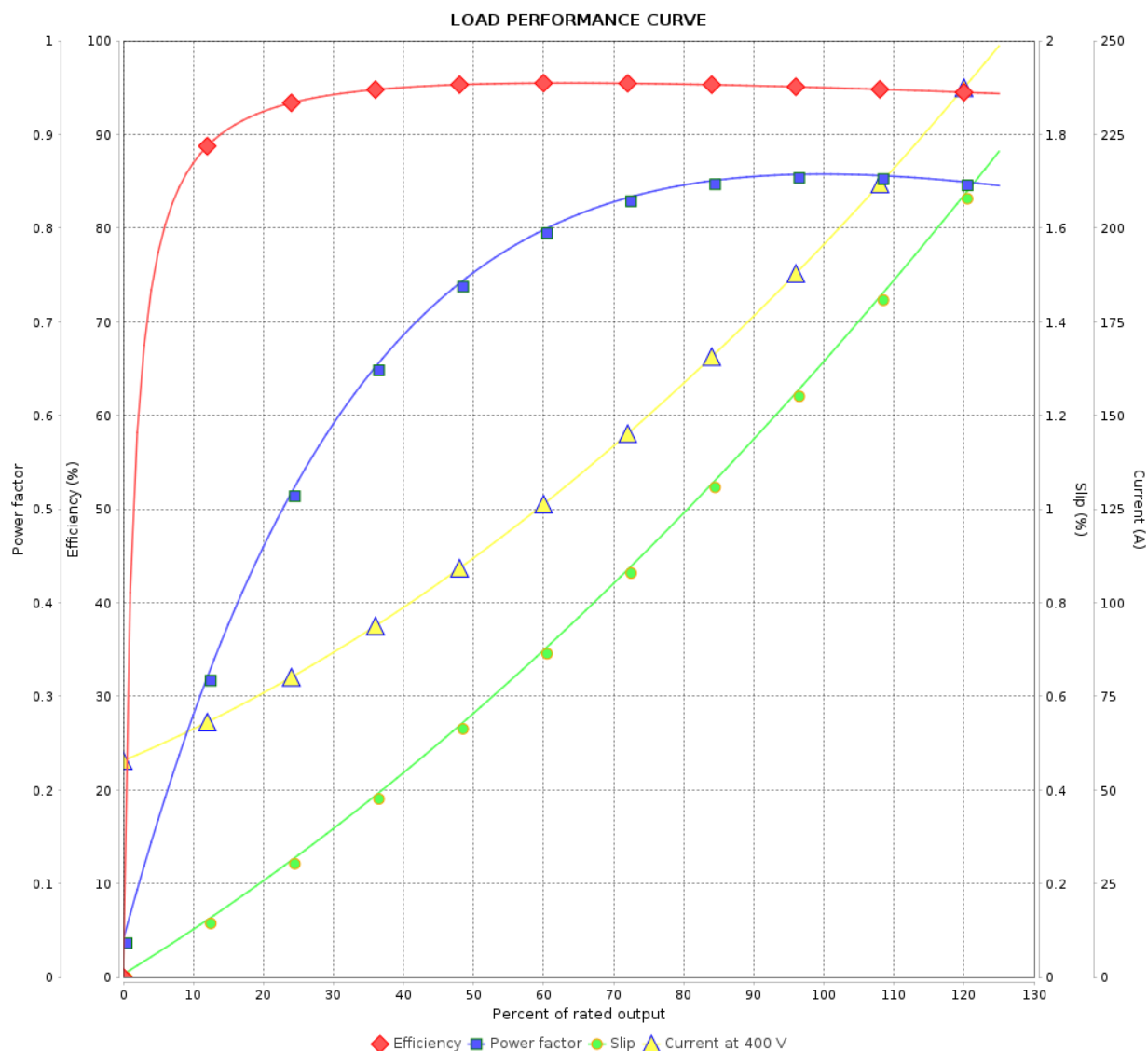
Three Phase Induction Motor - Squirrel Cage



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Product code : 11944847



Performance : 400 V 50 Hz 4P IE2

Rated current : 194 A
LRC : 5.8
Rated torque : 73.6 kgfm
Locked rotor torque : 180 %
Breakdown torque : 220 %
Rated speed : 1480 rpm

Moment of inertia (J) : 2.81 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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

LOAD PERFORMANCE CURVE

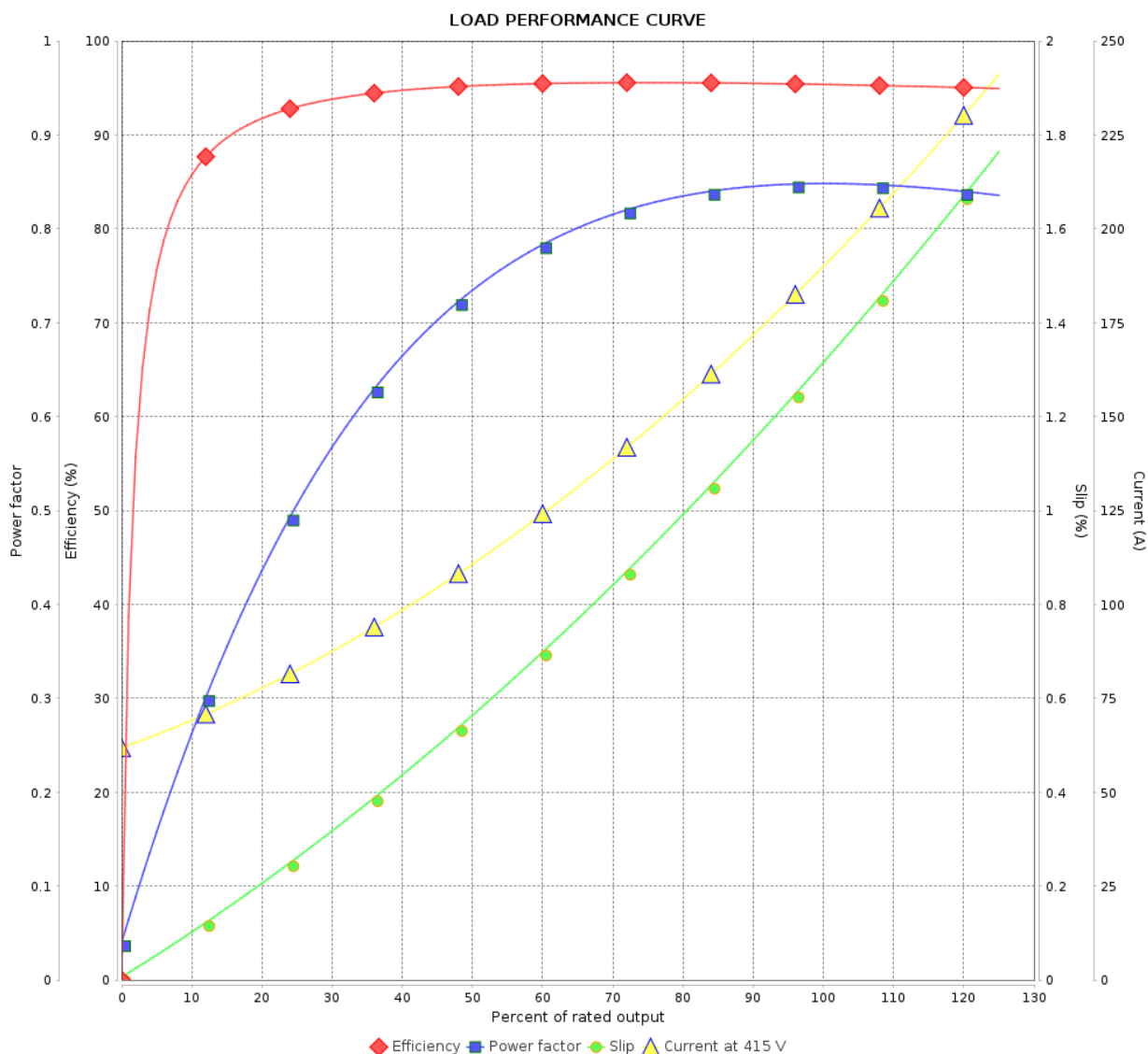
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 11944847



Performance : 415 V 50 Hz 4P IE3

Rated current : 189 A
LRC : 6.3
Rated torque : 73.6 kgfm
Locked rotor torque : 190 %
Breakdown torque : 240 %
Rated speed : 1480 rpm

Moment of inertia (J) : 2.81 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 9 / 9Revision		
Checked by				
Date	23/10/2024			