

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943070

Frame	: 364/5T	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)	: 1.22 kgm ²
Design	: B		

Output [HP]	40	30	30	30	40	40	40
Poles	8	8	8	8	8	8	8
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	50.9	47.8	46.3	45.7	62.9	60.0	58.1
L. R. Amperes [A]	300	292	310	324	283	300	320
LRC [A]	5.9x(Code G)	6.1x(Code H)	6.7x(Code J)	7.1x(Code J)	4.5x(Code E)	5.0x(Code F)	5.5x(Code G)
No load current [A]	21.5	20.7	22.2	23.4	20.7	22.2	23.4
Rated speed [RPM]	882	735	736	737	725	727	730
Slip [%]	2.00	2.00	1.87	1.73	3.33	3.07	2.67
Rated torque [kgfm]	32.9	29.6	29.6	29.5	40.0	39.9	39.8
Locked rotor torque [%]	170	600	210	229	140	160	170
Breakdown torque [%]	210	240	270	300	180	200	210
Service factor	1.25	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	46s (cold) 26s (hot)	81s (cold) 45s (hot)	52s (cold) 29s (hot)	52s (cold) 29s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level ²	60.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%						
	50%	92.4	91.5	91.5	90.9	91.7	91.7
	75%	93.0	91.6	91.9	91.8	91.0	91.7
	100%	92.4	90.9	91.5	91.7	89.5	91.0
Power Factor	25%						
	50%	0.65	0.60	0.55	0.52	0.70	0.62
	75%	0.75	0.71	0.68	0.65	0.78	0.74
	100%	0.80	0.77	0.75	0.73	0.81	0.79

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

Losses (%)	P1 (0,9;1,0)	8.1	8.1	8.1	8.1	8.1	8.1
	P2 (0,5;1,0)	7.1	7.1	7.1	7.1	7.1	7.1
	P3 (0,25;1,0)	6.5	6.5	6.5	6.5	6.5	6.5
	P4 (0,9;0,5)	3.6	3.6	3.6	3.6	3.6	3.6
	P5 (0,5;0,5)	2.6	2.6	2.6	2.6	2.6	2.6
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.2	1.2	1.2	1.2	1.2	1.2

Bearing type	: 6314 C3	Non drive end	6314 C3	Foundation loads	
Sealing	: Taconite		Taconite	Max. traction	: 938 kgf
	: Labyrinth		Labyrinth	Max. compression	: 938 kgf
Lubrication interval	: 20000 h		20000 h		
Lubricant amount	: 27 g		27 g		
Lubricant type	: Mobil Polyrex EM				

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Customer

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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.

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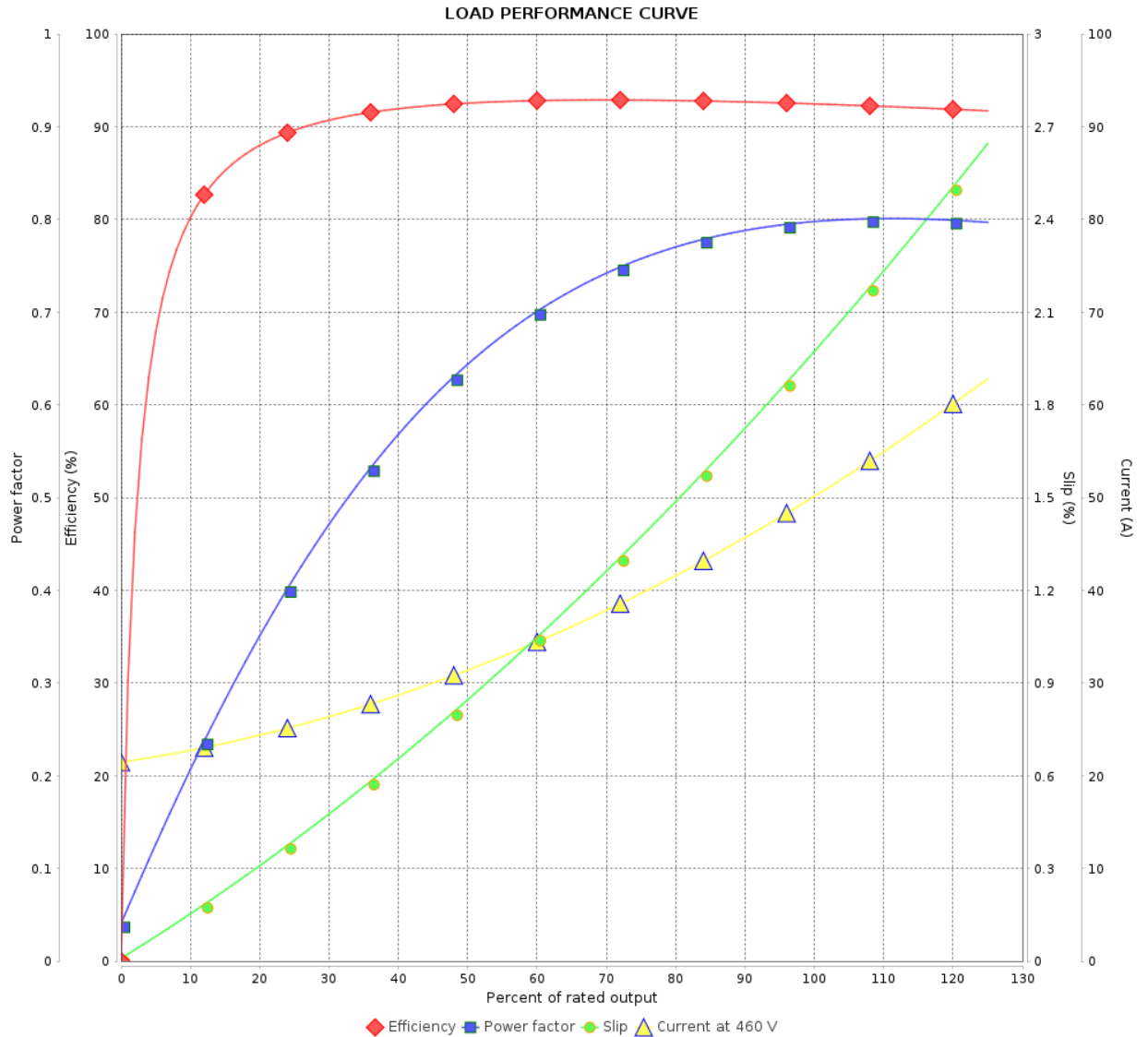
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943070



Performance : 460 V 60 Hz 8P

Rated current : 50.9 A
LRC : 5.9
Rated torque : 32.9 kgfm
Locked rotor torque : 170 %
Breakdown torque : 210 %
Rated speed : 882 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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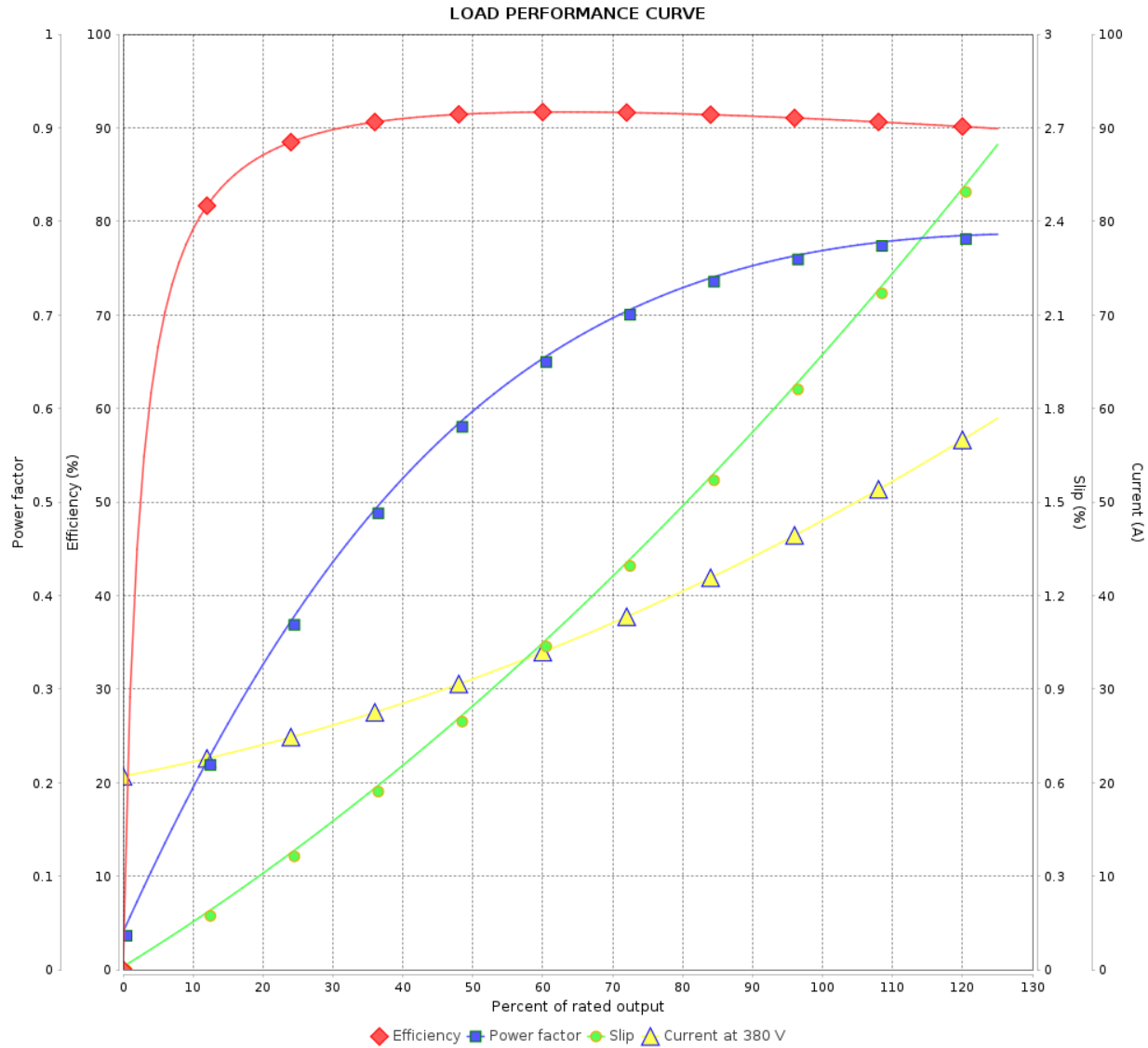
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943070



Performance : 380 V 50 Hz 8P IE3

Rated current : 47.8 A
LRC : 6.1
Rated torque : 29.6 kgfm
Locked rotor torque : 600 %
Breakdown torque : 240 %
Rated speed : 735 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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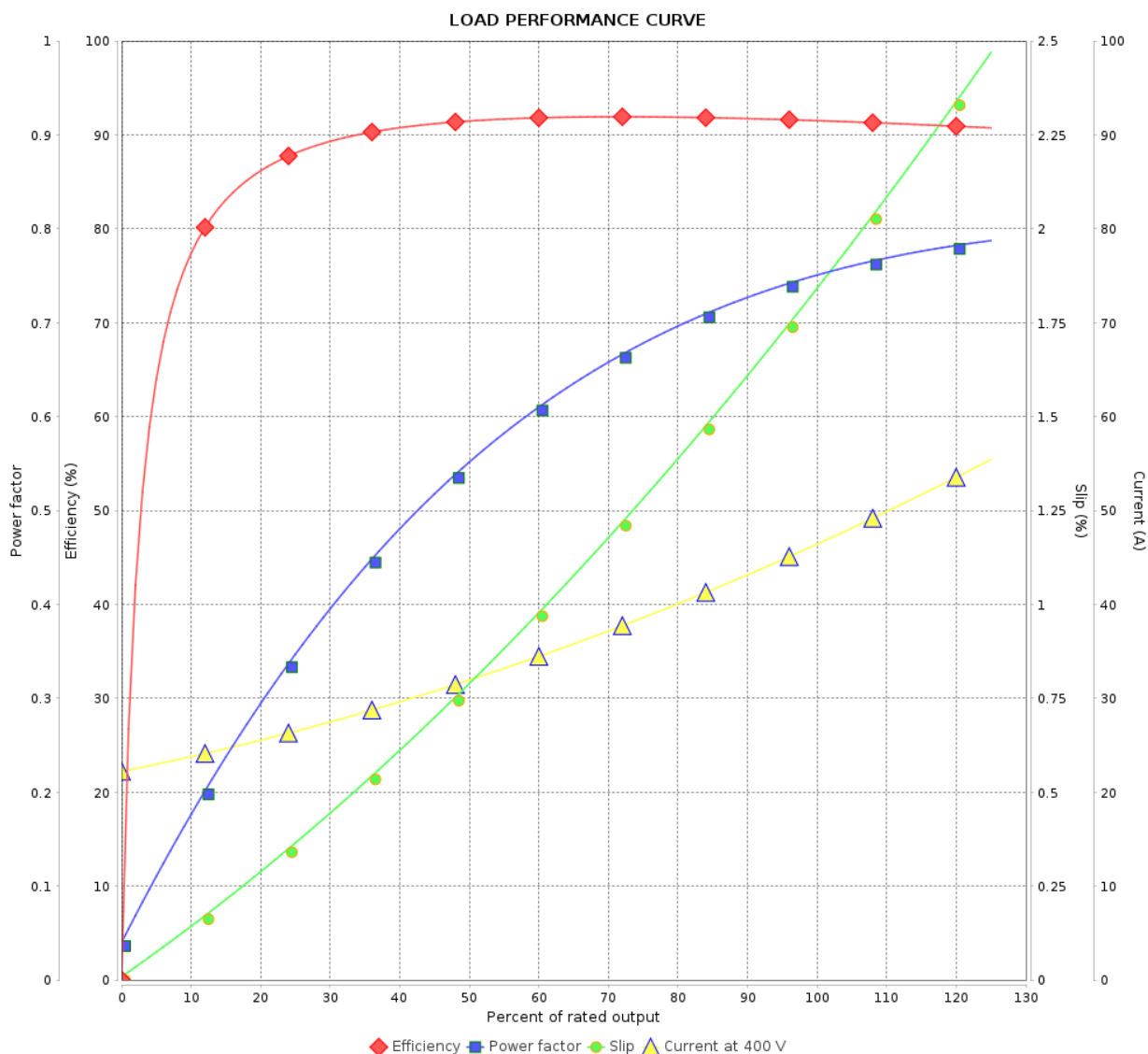
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943070



Performance : 400 V 50 Hz 8P IE3

Rated current : 46.3 A
LRC : 6.7
Rated torque : 29.6 kgfm
Locked rotor torque : 210 %
Breakdown torque : 270 %
Rated speed : 736 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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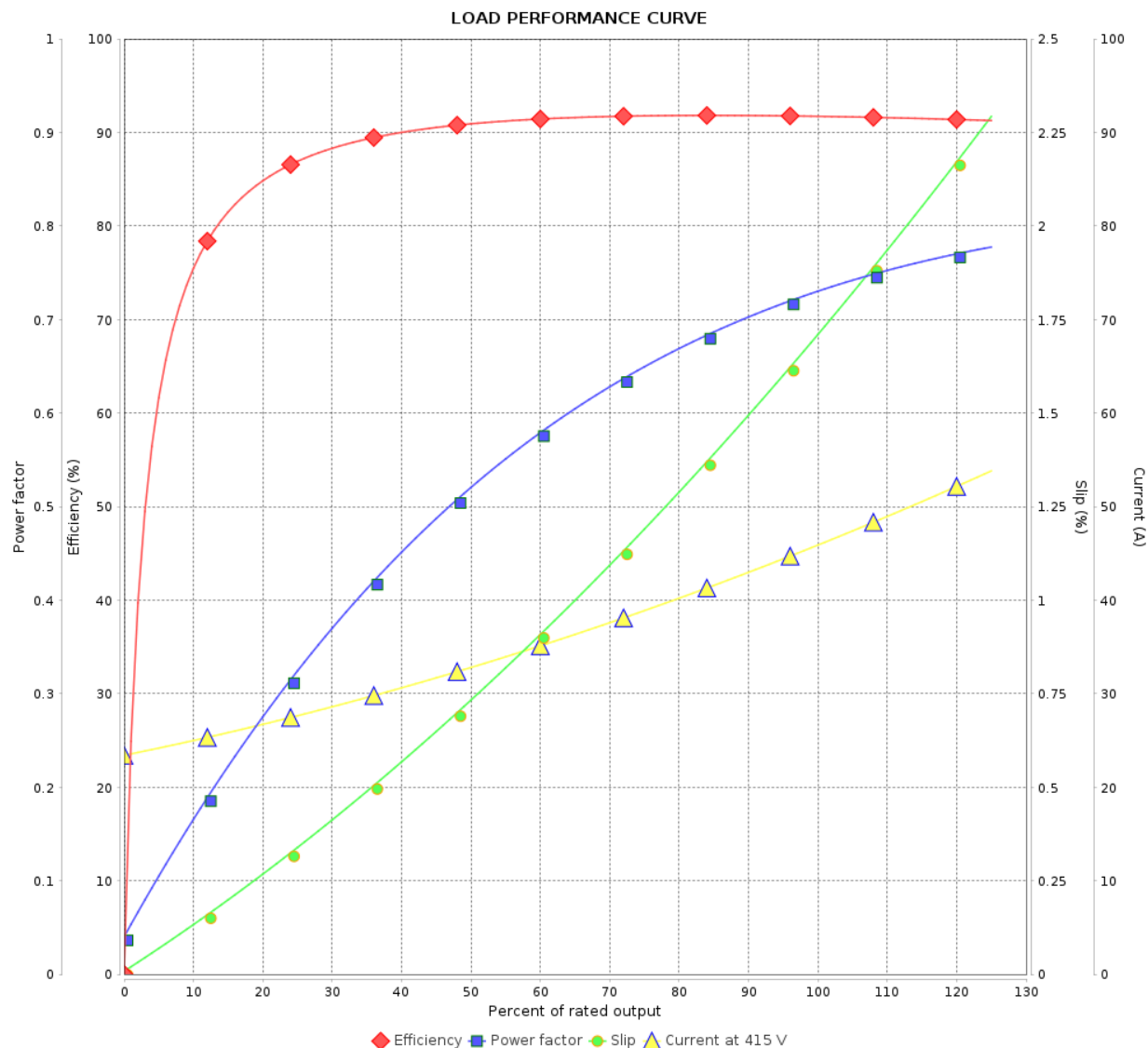
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943070



Performance : 415 V 50 Hz 8P IE3

Rated current : 45.7 A
LRC : 7.1
Rated torque : 29.5 kgfm
Locked rotor torque : 229 %
Breakdown torque : 300 %
Rated speed : 737 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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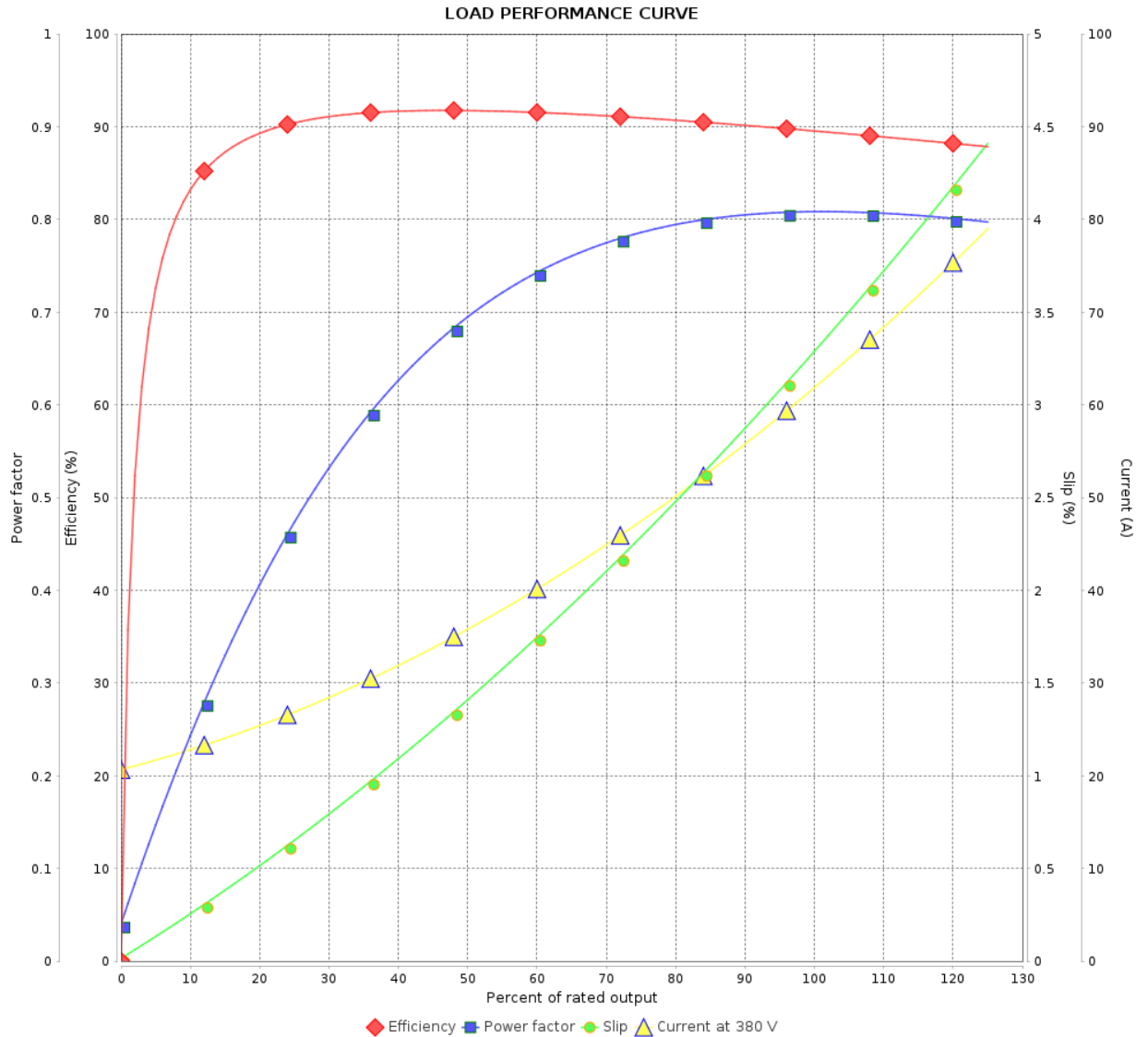
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943070



Performance : 380 V 50 Hz 8P IE1

Rated current : 62.9 A
LRC : 4.5
Rated torque : 40.0 kgfm
Locked rotor torque : 140 %
Breakdown torque : 180 %
Rated speed : 725 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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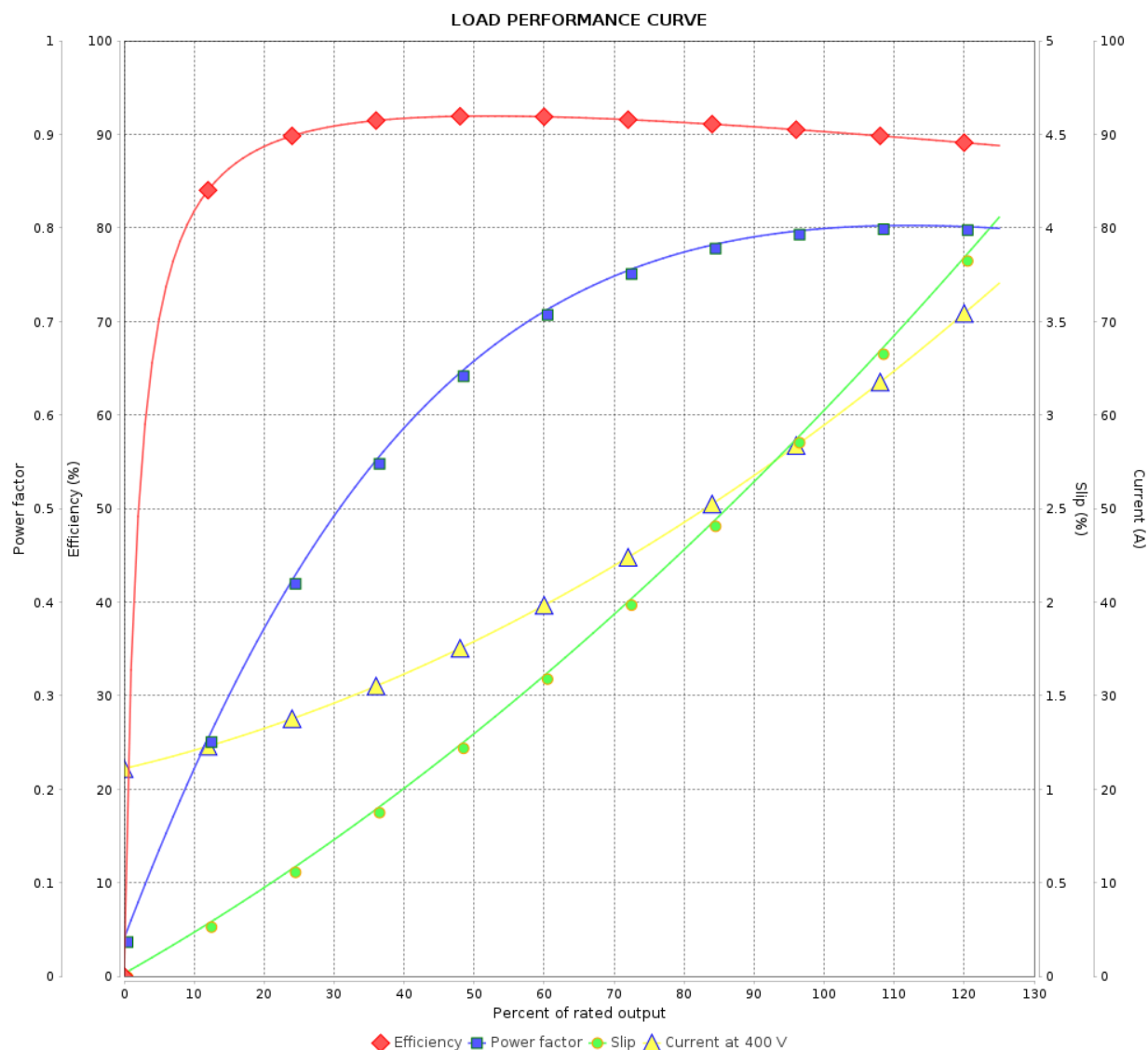
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943070



Performance : 400 V 50 Hz 8P IE2

Rated current : 60.0 A
LRC : 5.0
Rated torque : 39.9 kgfm
Locked rotor torque : 160 %
Breakdown torque : 200 %
Rated speed : 727 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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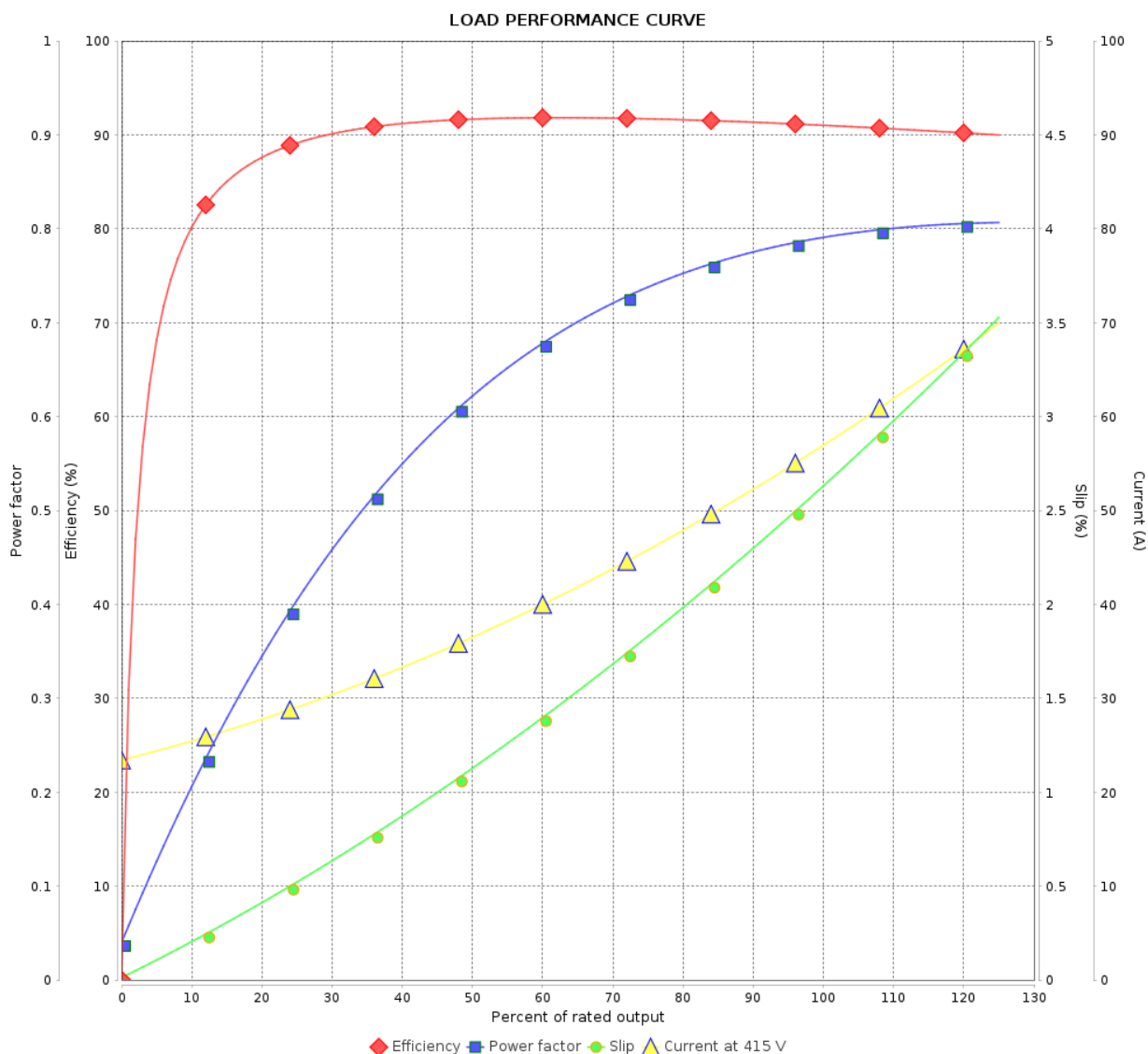
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943070



Performance : 415 V 50 Hz 8P IE2

Rated current : 58.1 A
LRC : 5.5
Rated torque : 39.8 kgfm
Locked rotor torque : 170 %
Breakdown torque : 210 %
Rated speed : 730 rpm

Moment of inertia (J) : 1.22 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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