

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 ²	: 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	90.2
Power Factor	25%						
	50%	0.65	0.60	0.55	0.52	0.70	0.66
	75%	0.75	0.71	0.68	0.65	0.78	0.76
	100%	0.80	0.77	0.75	0.73	0.81	0.80

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

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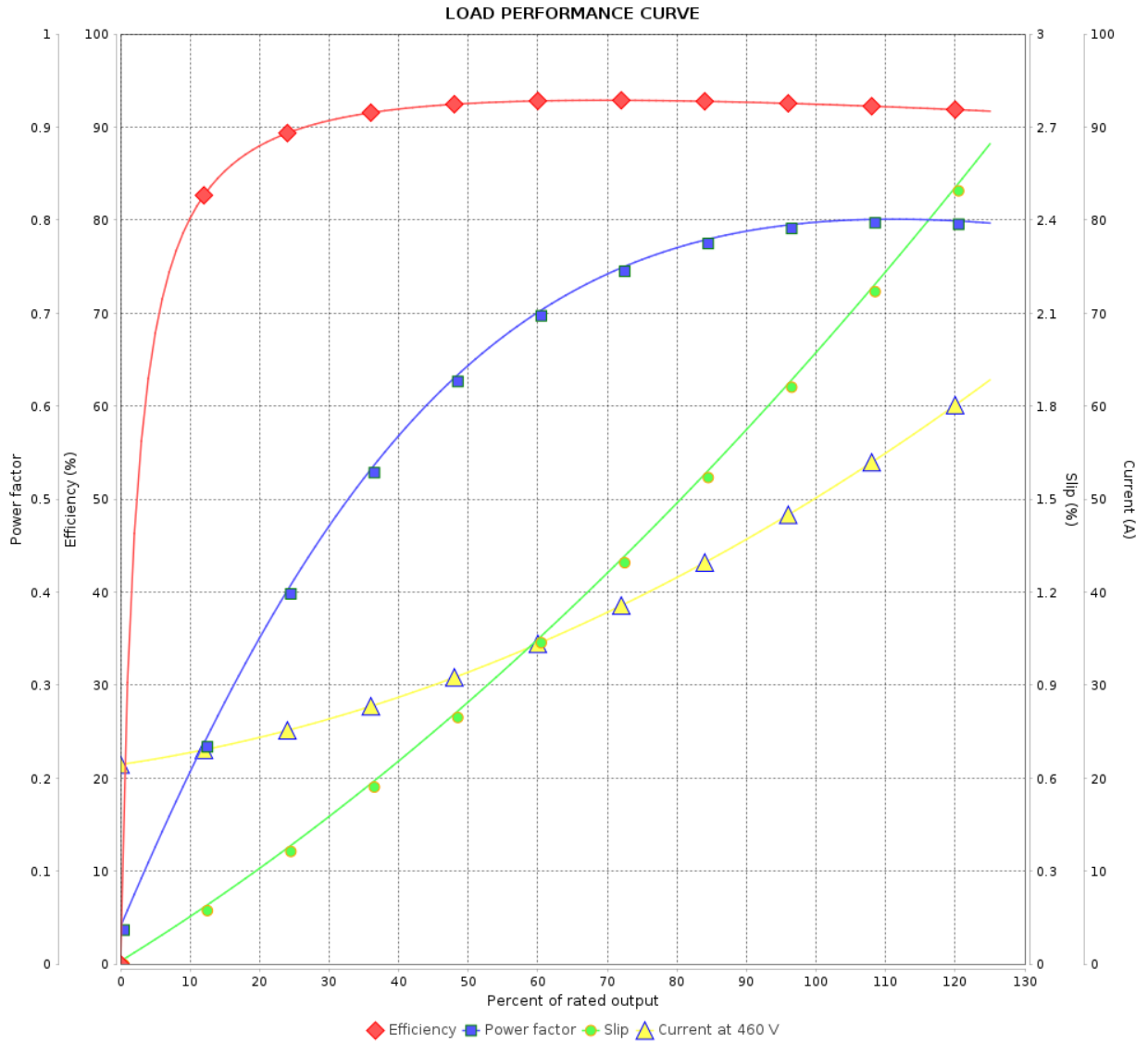
Three Phase Induction Motor - Squirrel Cage



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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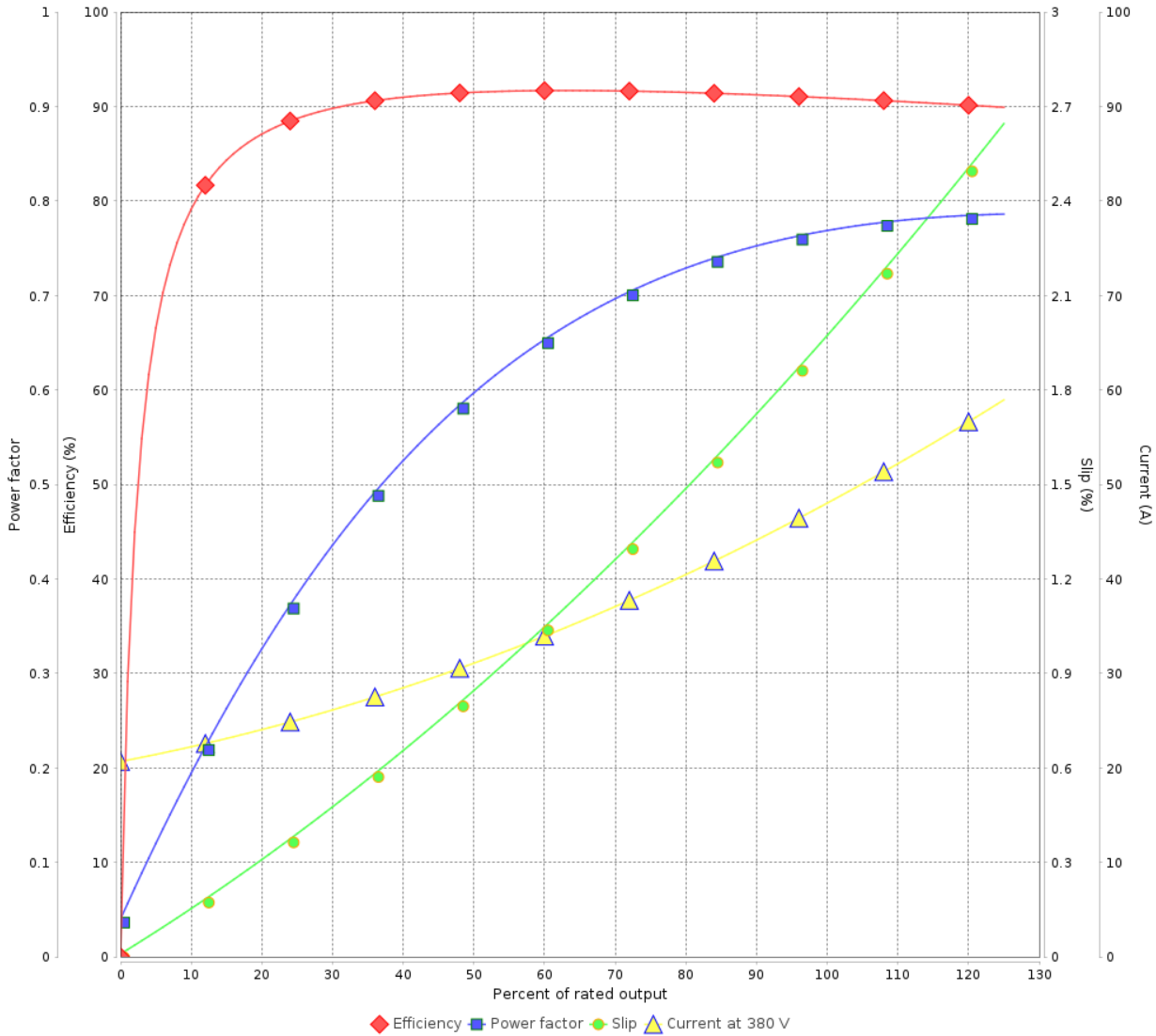
Three Phase Induction Motor - Squirrel Cage



Customer :

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

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Performance : 380 V 50 Hz 8P IE3

Rated current	: 47.8 A	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 29.6 kgfm	Insulation class	: F
Locked rotor torque	: 600 %	Service factor	: 1.00
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 735 rpm	Design	: B

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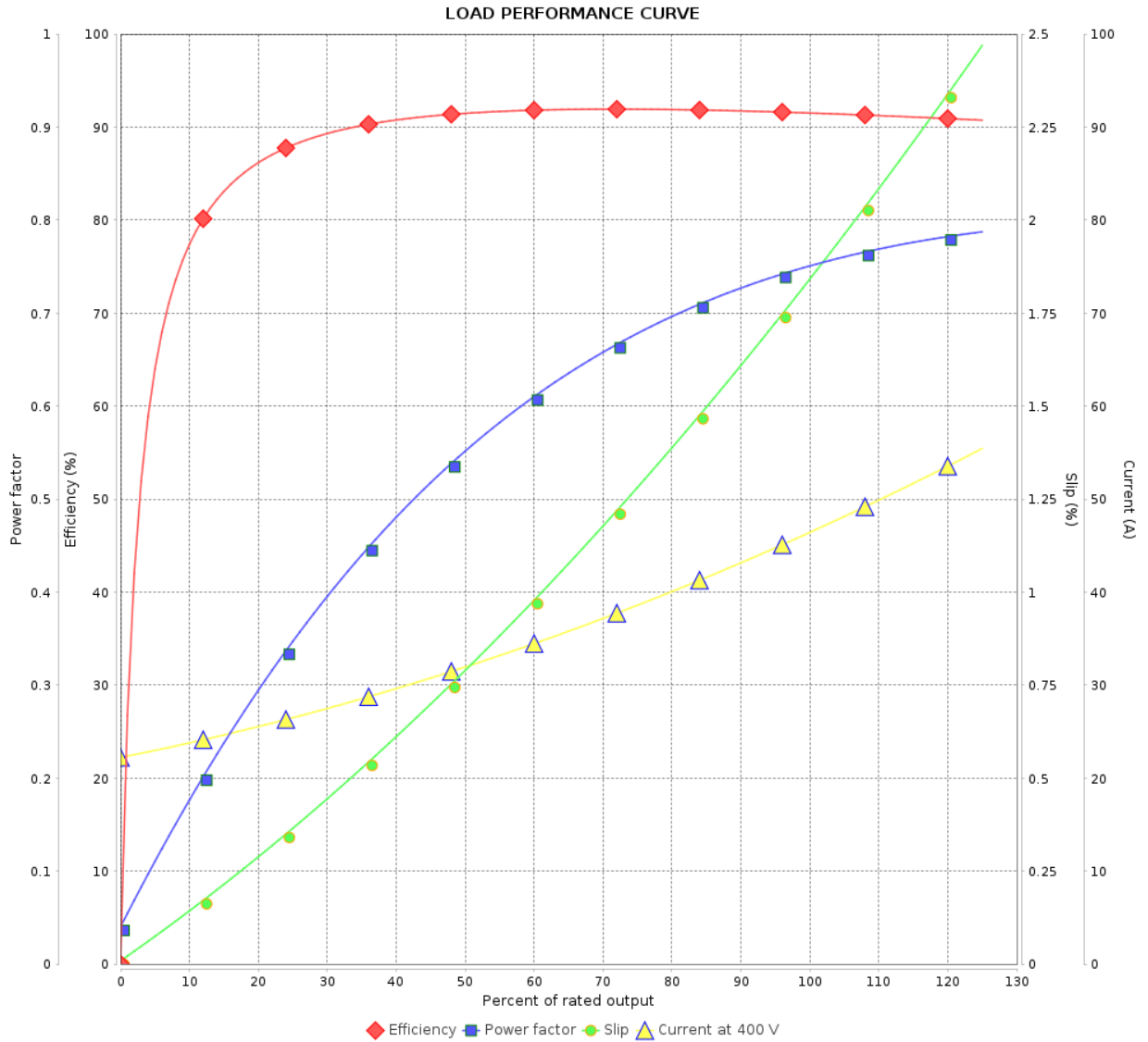
Three Phase Induction Motor - Squirrel Cage



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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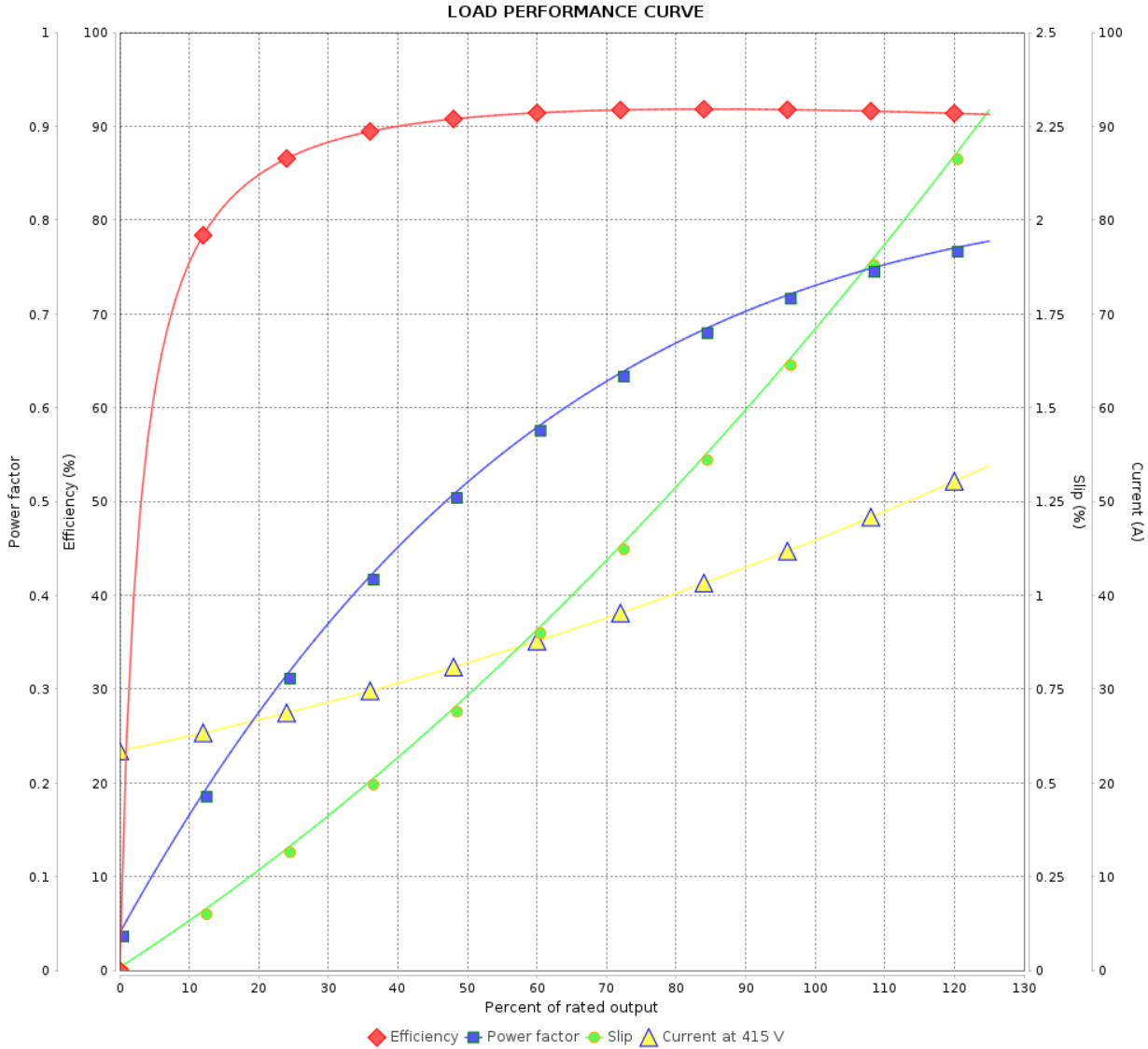
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Three Phase Induction Motor - Squirrel Cage



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	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 7.1	Duty cycle	: Cont.(S1)
Rated torque	: 29.5 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 737 rpm	Design	: B

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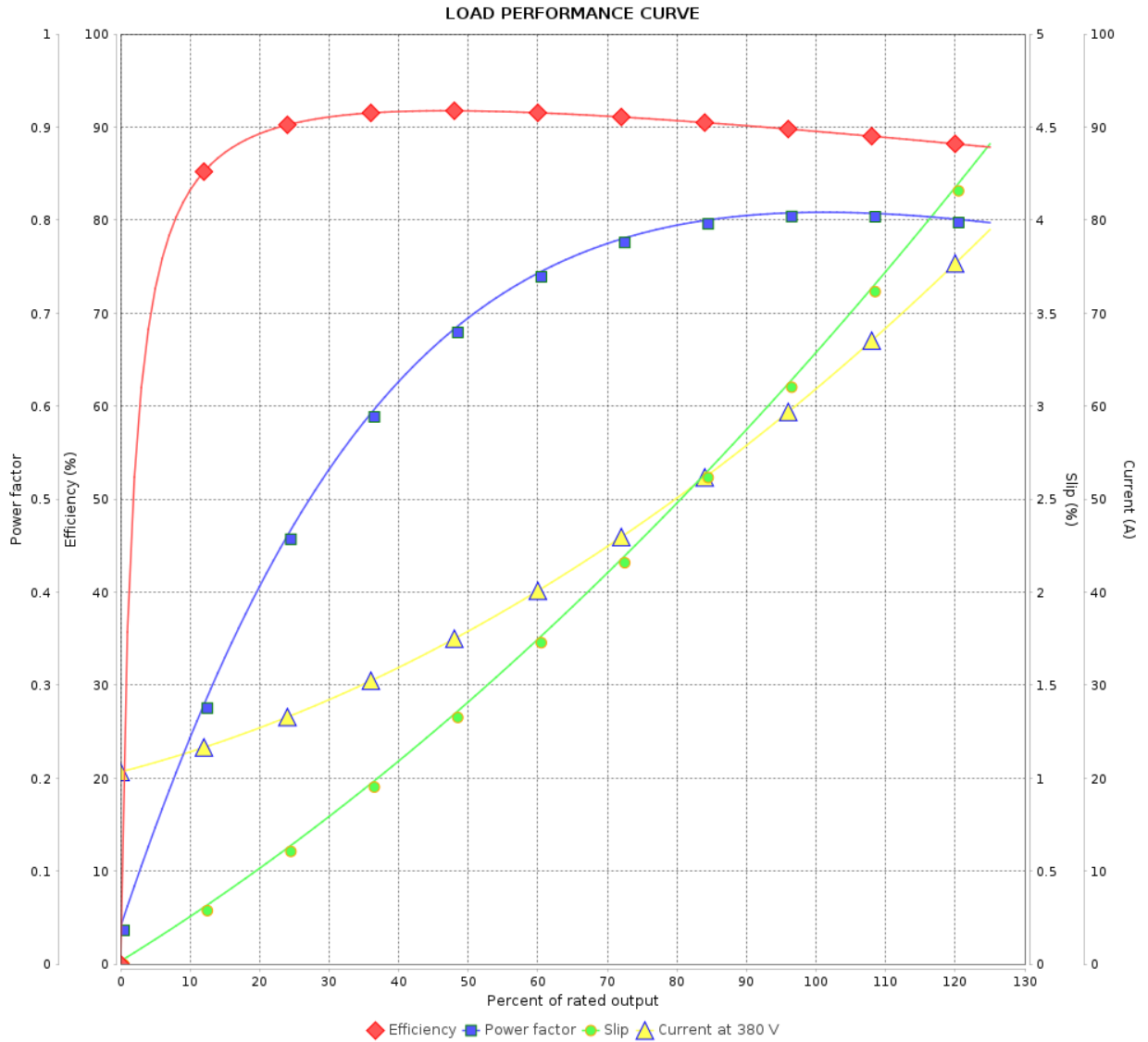
Three Phase Induction Motor - Squirrel Cage



Customer :

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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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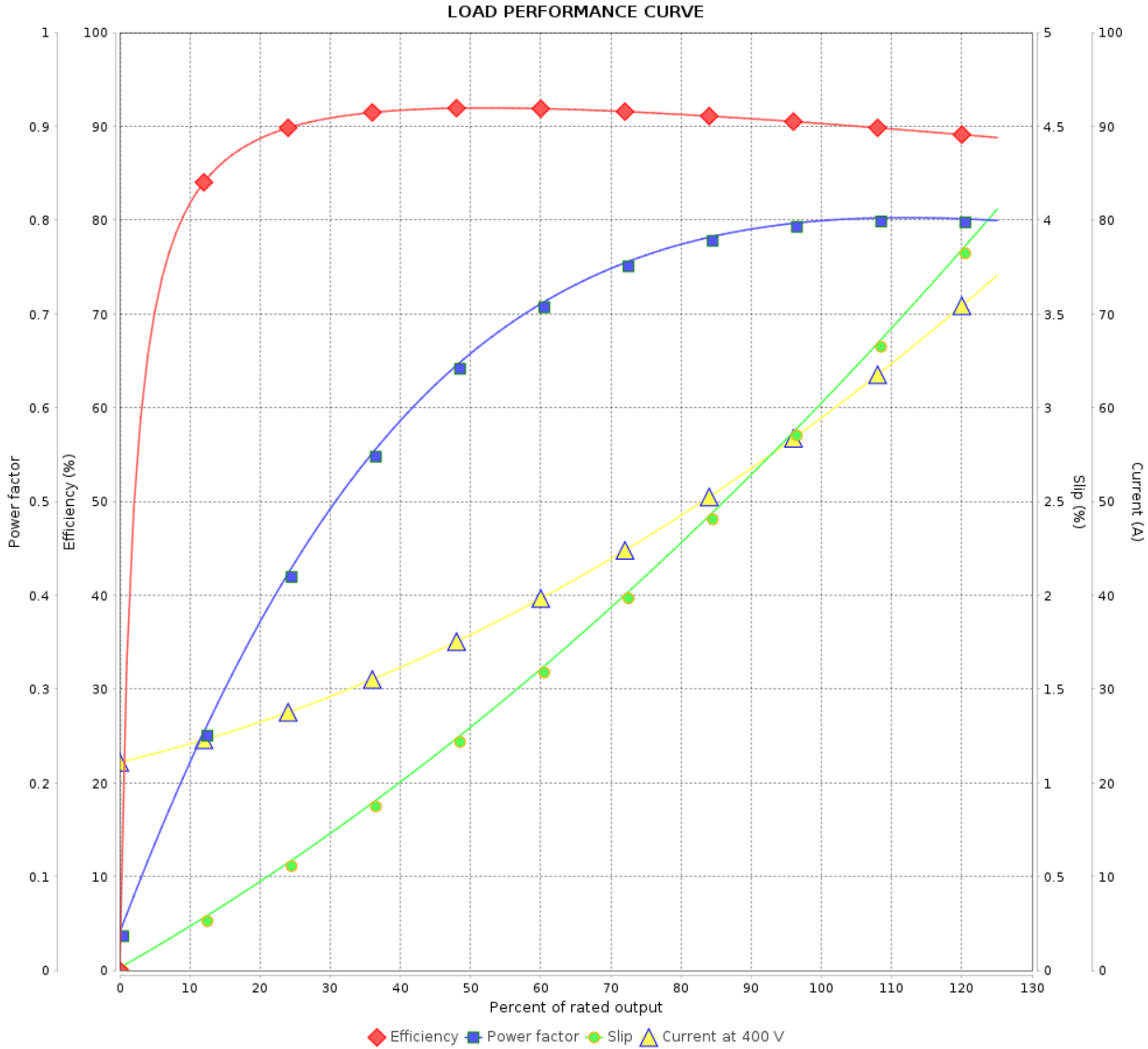
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Three Phase Induction Motor - Squirrel Cage



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	Moment of inertia (J)	: 1.22 kgm ²
LRC	: 5.0	Duty cycle	: Cont.(S1)
Rated torque	: 39.9 kgfm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.00
Breakdown torque	: 200 %	Temperature rise	: 105 K
Rated speed	: 727 rpm	Design	: B

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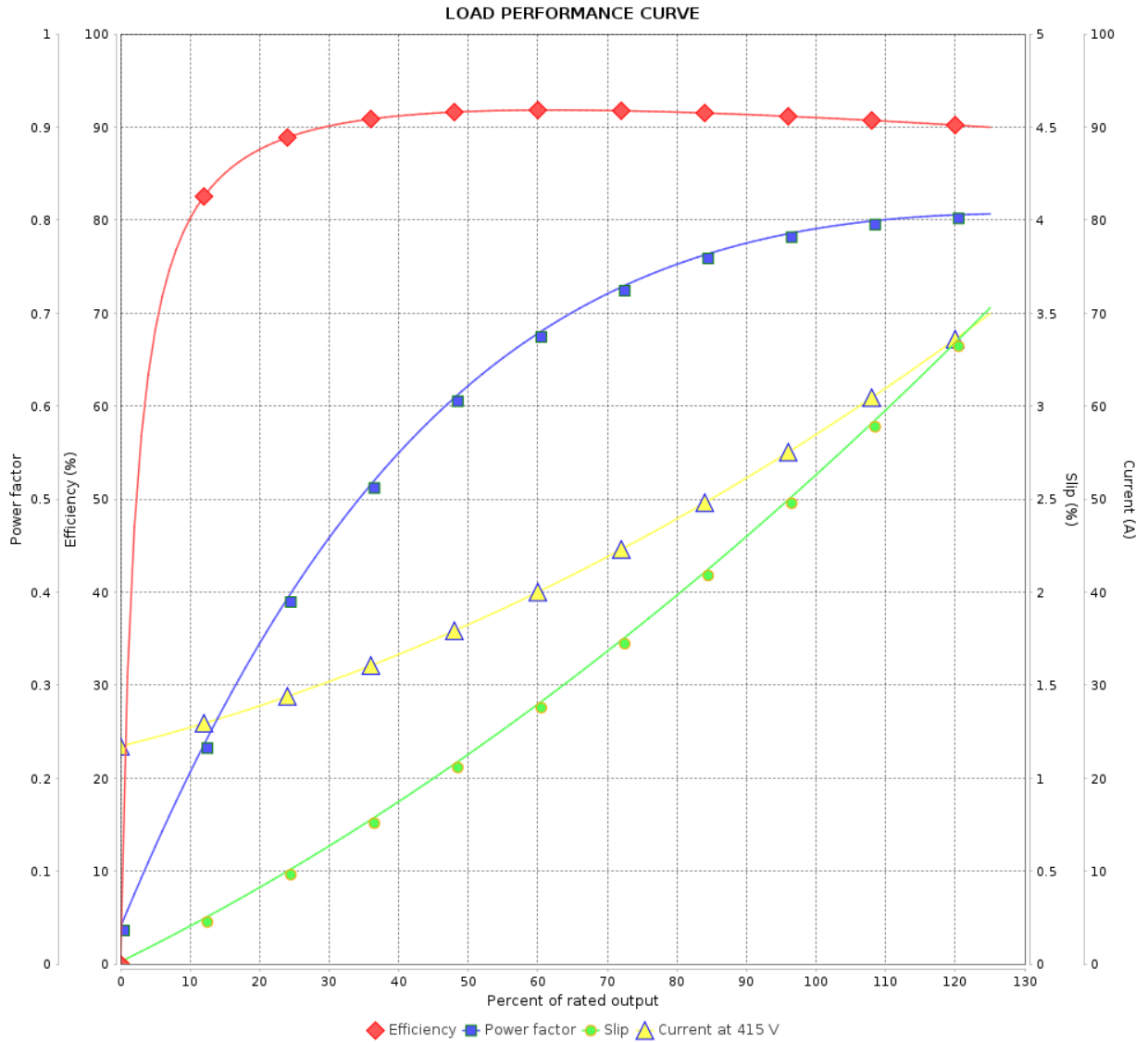
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Three Phase Induction Motor - Squirrel Cage



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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