

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943059

Frame	: 324TC	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	: 262 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.3861 kgm ²
Design	: B		

Output [HP]	40	30	30	30	40	40	40
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]	47.1	42.8	41.6	41.1	57.4	54.1	52.8
L. R. Amperes [A]	287	291	308	316	287	303	317
LRC [A]	6.1x(Code G)	6.8x(Code H)	7.4x(Code J)	7.7x(Code J)	5.0x(Code E)	5.6x(Code F)	6.0x(Code G)
No load current [A]	17.0	16.8	17.3	18.6	16.8	17.3	18.6
Rated speed [RPM]	1775	1477	1480	1481	1460	1465	1470
Slip [%]	1.39	1.53	1.33	1.27	2.67	2.33	2.00
Rated torque [kgfm]	16.4	14.7	14.7	14.7	19.9	19.8	19.7
Locked rotor torque [%]	229	240	270	280	170	190	210
Breakdown torque [%]	240	250	290	310	180	210	229
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	36s (cold) 20s (hot)	25s (cold) 14s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)	25s (cold) 14s (hot)	27s (cold) 15s (hot)	27s (cold) 15s (hot)
Noise level ²	66.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)	63.0 dB(A)
Efficiency (%)	25%						
	50%	93.6	92.9	92.4	91.7	93.6	93.0
	75%	94.1	93.1	93.0	92.6	93.0	93.0
	100%	94.1	93.0	93.2	93.1	92.4	93.0
Power Factor	25%						
	50%	0.72	0.68	0.64	0.62	0.78	0.74
	75%	0.80	0.78	0.75	0.73	0.84	0.82
	100%	0.85	0.84	0.82	0.80	0.86	0.85

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

Losses (%)	P1 (0,9;1,0)	6.1	6.1	6.1	6.1	6.1	6.1
	P2 (0,5;1,0)	5.1	5.1	5.1	5.1	5.1	5.1
	P3 (0,25;1,0)	4.9	4.9	4.9	4.9	4.9	4.9
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.9	1.9	1.9	1.9	1.9	1.9
	P6 (0,5;0,25)	1.2	1.2	1.2	1.2	1.2	1.2
	P7 (0,25;0,25)	0.8	0.8	0.8	0.8	0.8	0.8

Bearing type	: Drive end 6312 C3 Non drive end 6212 C3	Foundation loads Max. traction : 441 kgf Max. compression : 702 kgf
Sealing	: Taconite Labyrinth Labyrinth	
Lubrication interval	: 20000 h 20000 h	
Lubricant amount	: 21 g 13 g	
Lubricant type	: Mobil Polyrex EM	

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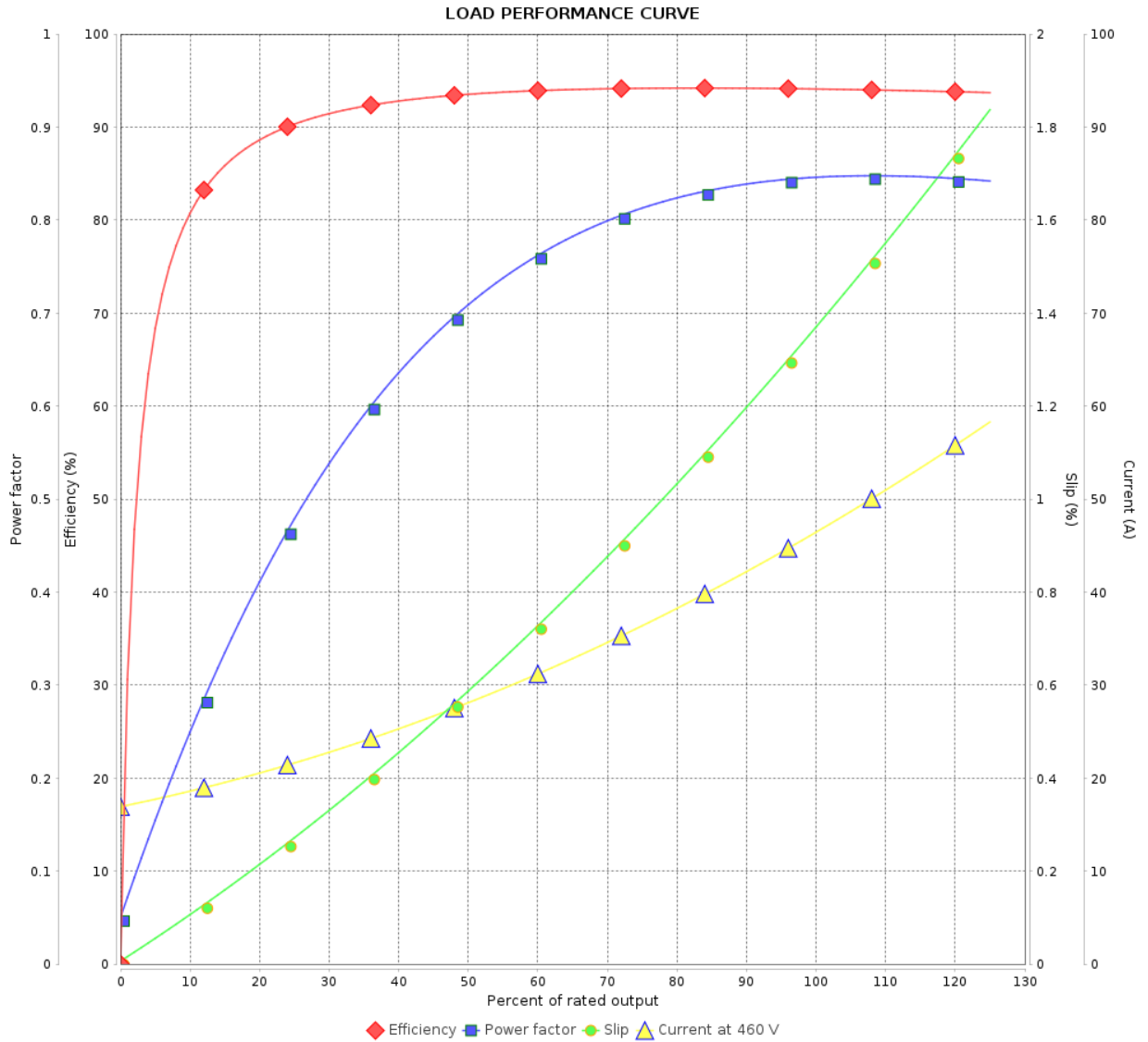
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943059



Performance : 460 V 60 Hz 4P

Rated current	: 47.1 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 6.1	Duty cycle	: Cont.(S1)
Rated torque	: 16.4 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 240 %	Temperature rise	: 80 K
Rated speed	: 1775 rpm	Design	: B

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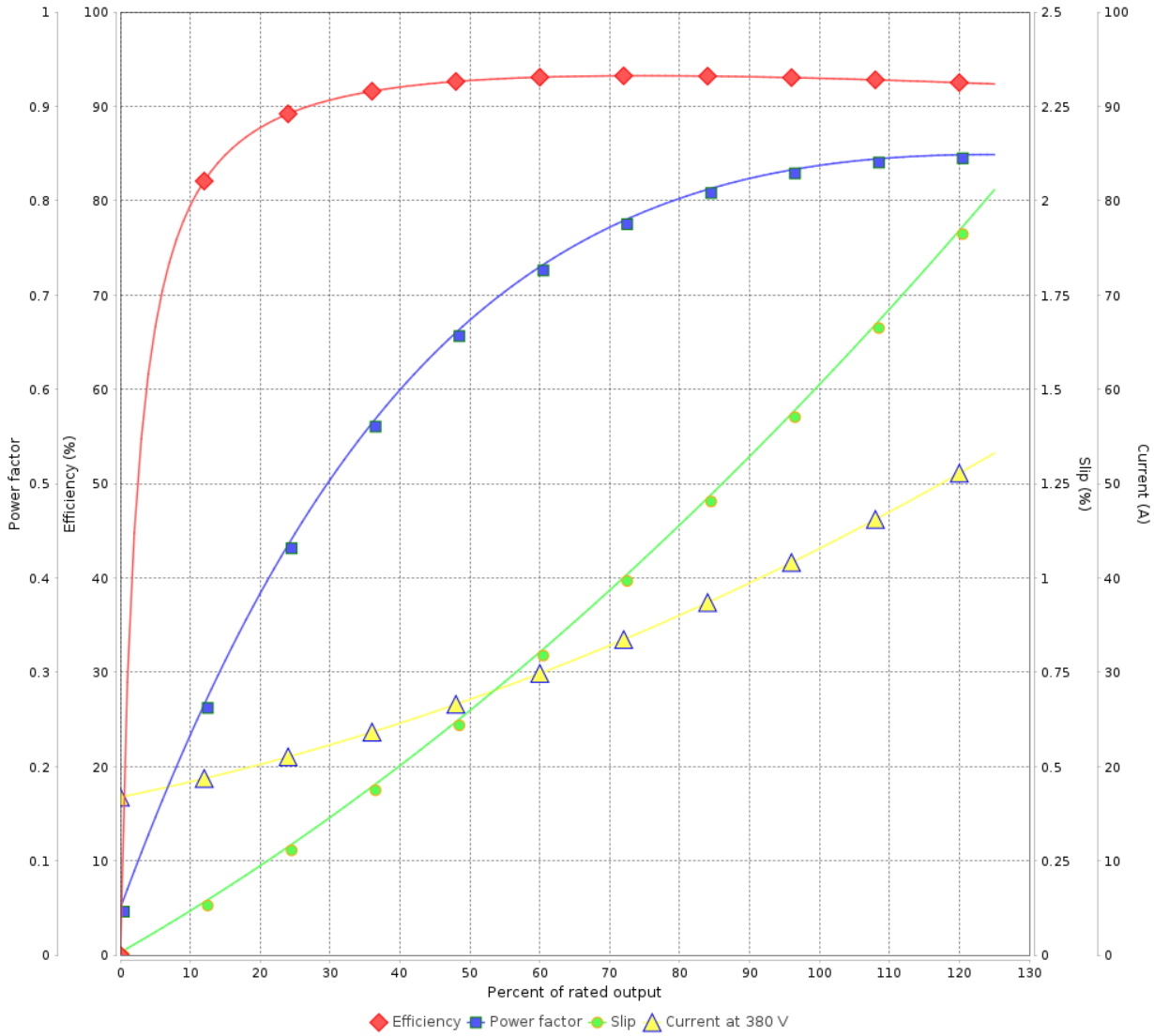
Three Phase Induction Motor - Squirrel Cage



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Performance : 380 V 50 Hz 4P IE3

Rated current	: 42.8 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 6.8	Duty cycle	: Cont.(S1)
Rated torque	: 14.7 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1477 rpm	Design	: B

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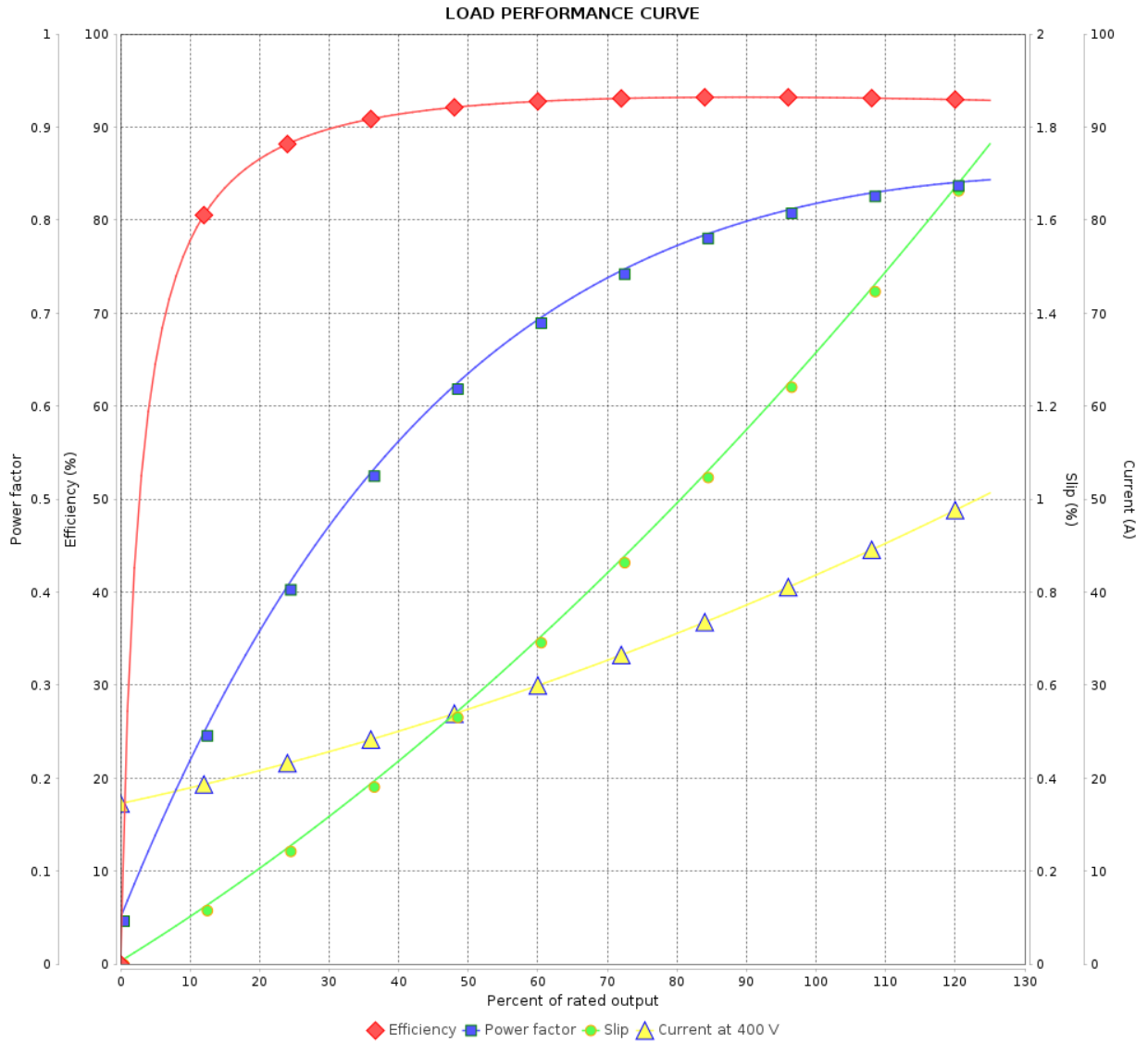
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 4P IE3

Rated current : 41.6 A
 LRC : 7.4
 Rated torque : 14.7 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 290 %
 Rated speed : 1480 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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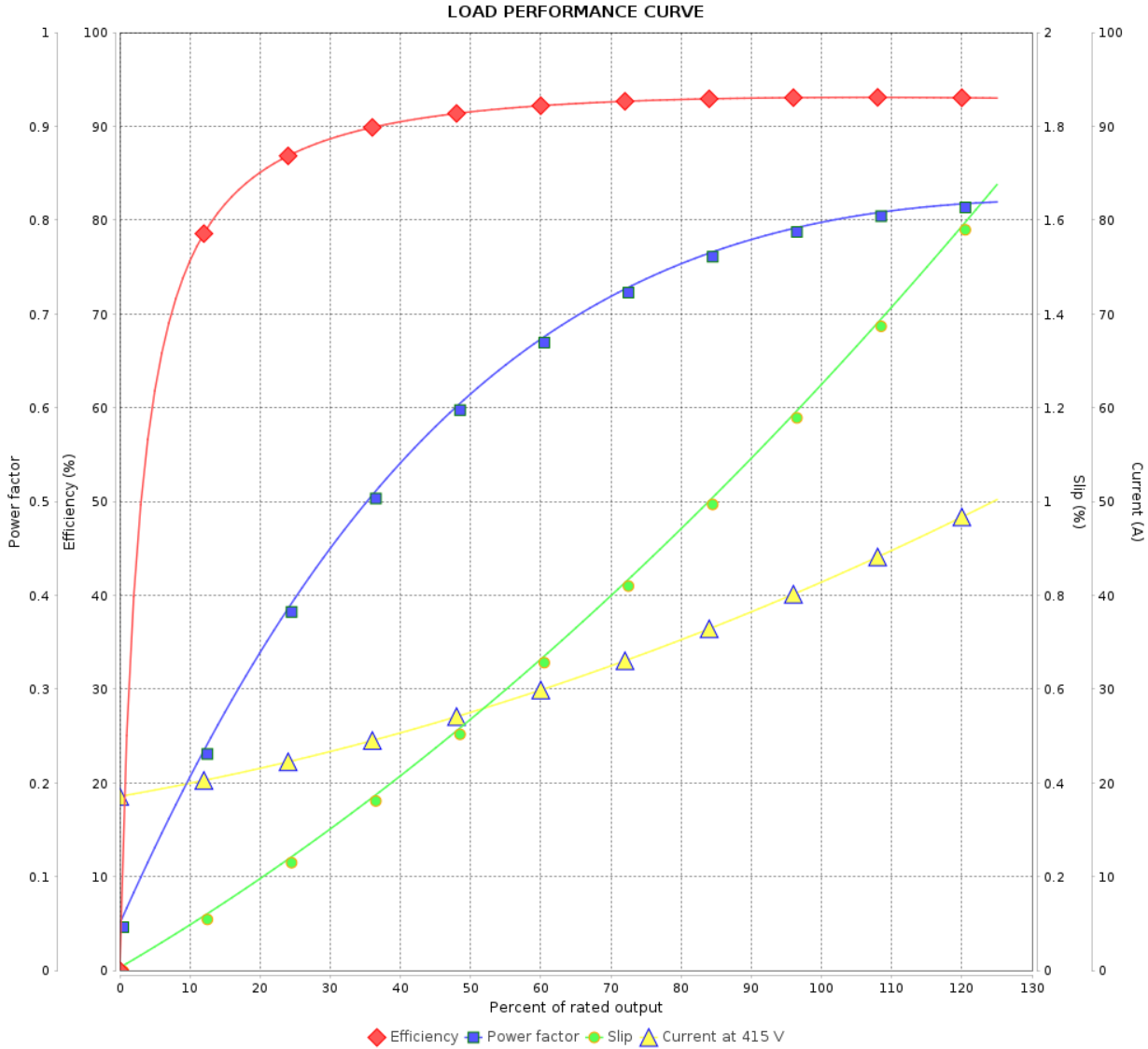
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Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11943059



Performance : 415 V 50 Hz 4P IE3

Rated current	: 41.1 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 7.7	Duty cycle	: Cont.(S1)
Rated torque	: 14.7 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1481 rpm	Design	: B

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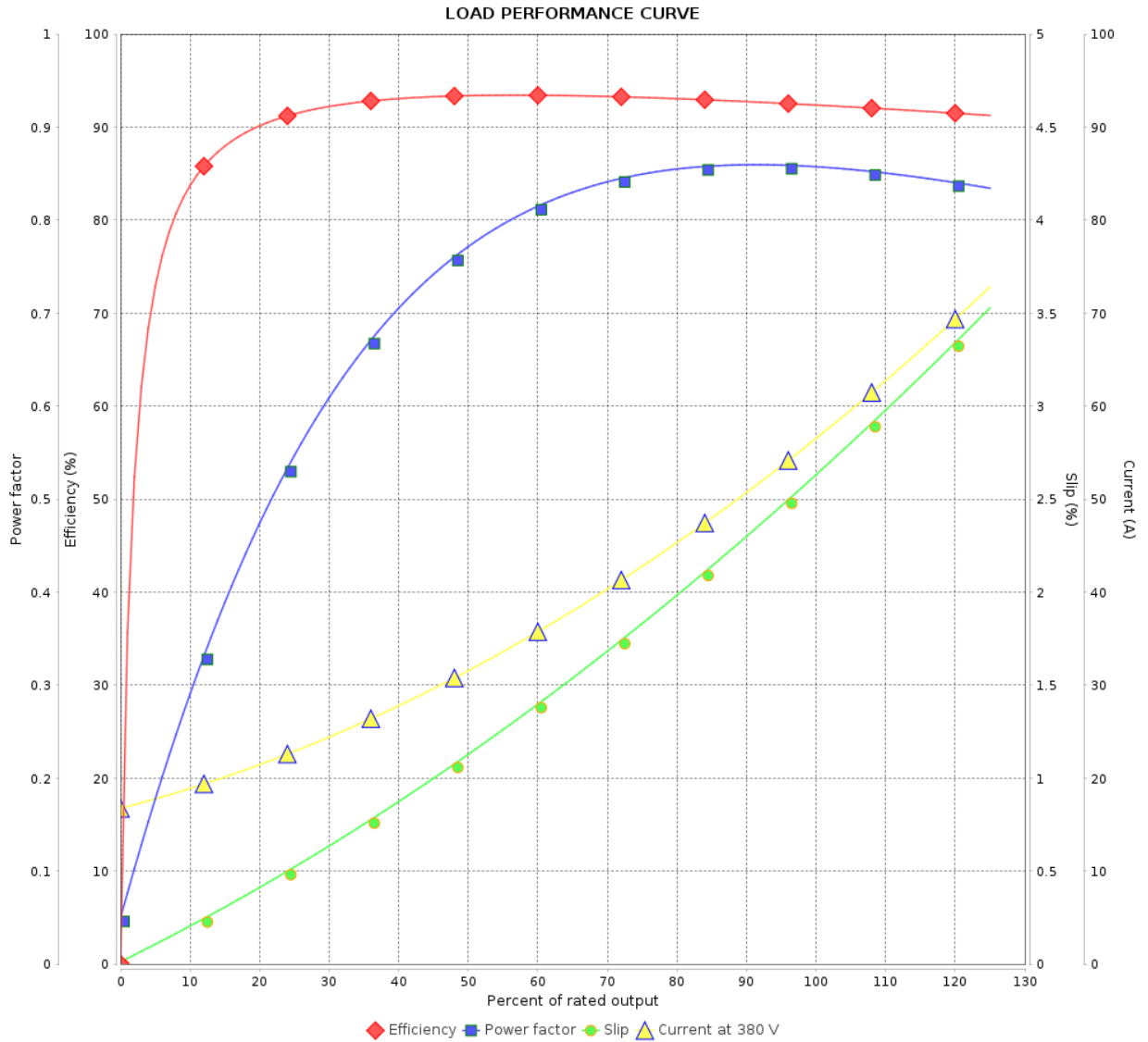
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 11943059



Performance : 380 V 50 Hz 4P IE2

Rated current : 57.4 A
 LRC : 5.0
 Rated torque : 19.9 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 180 %
 Rated speed : 1460 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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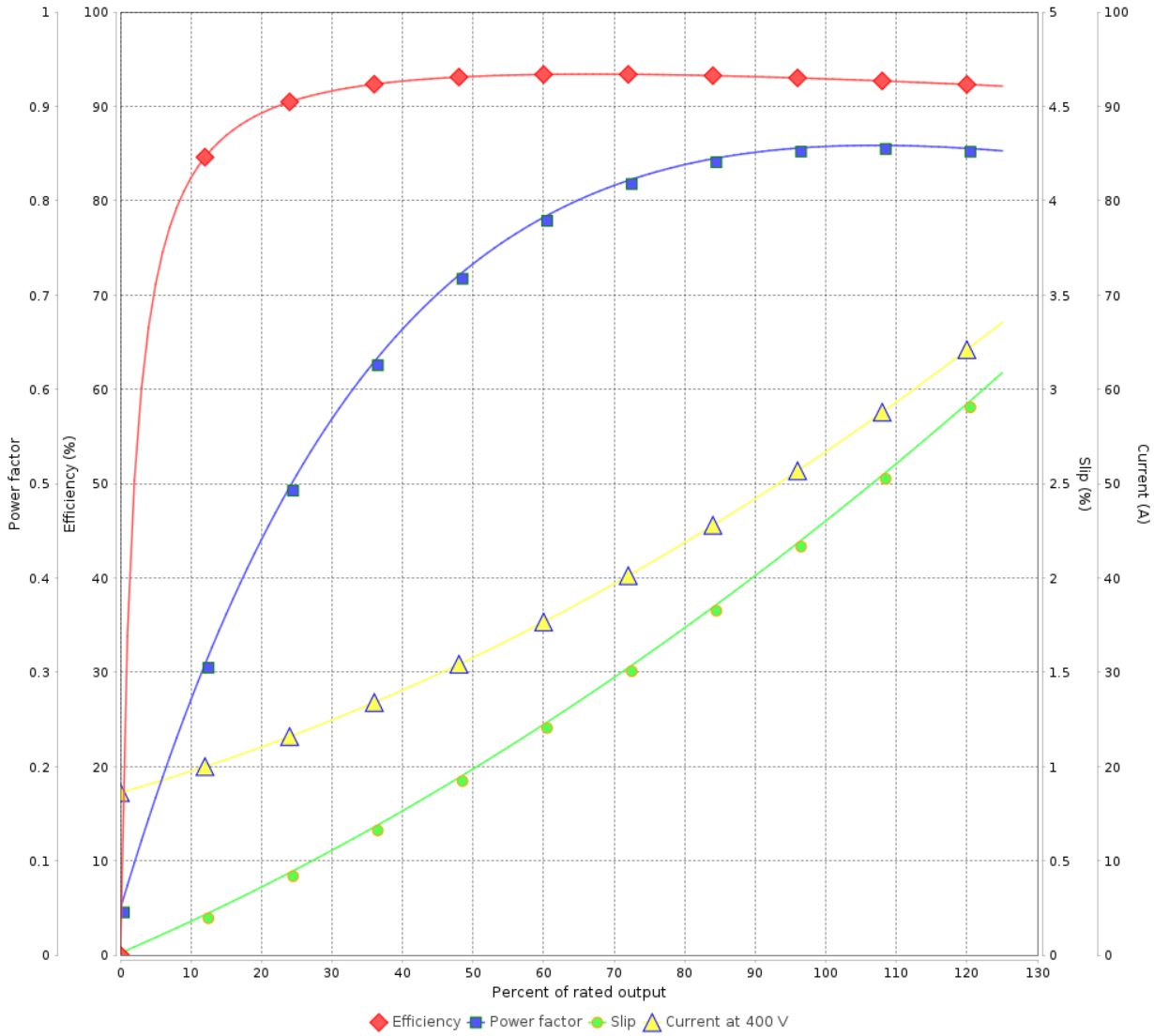
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Performance : 400 V 50 Hz 4P IE2

Rated current	: 54.1 A	Moment of inertia (J)	: 0.3861 kgm ²
LRC	: 5.6	Duty cycle	: Cont.(S1)
Rated torque	: 19.8 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 1465 rpm	Design	: B

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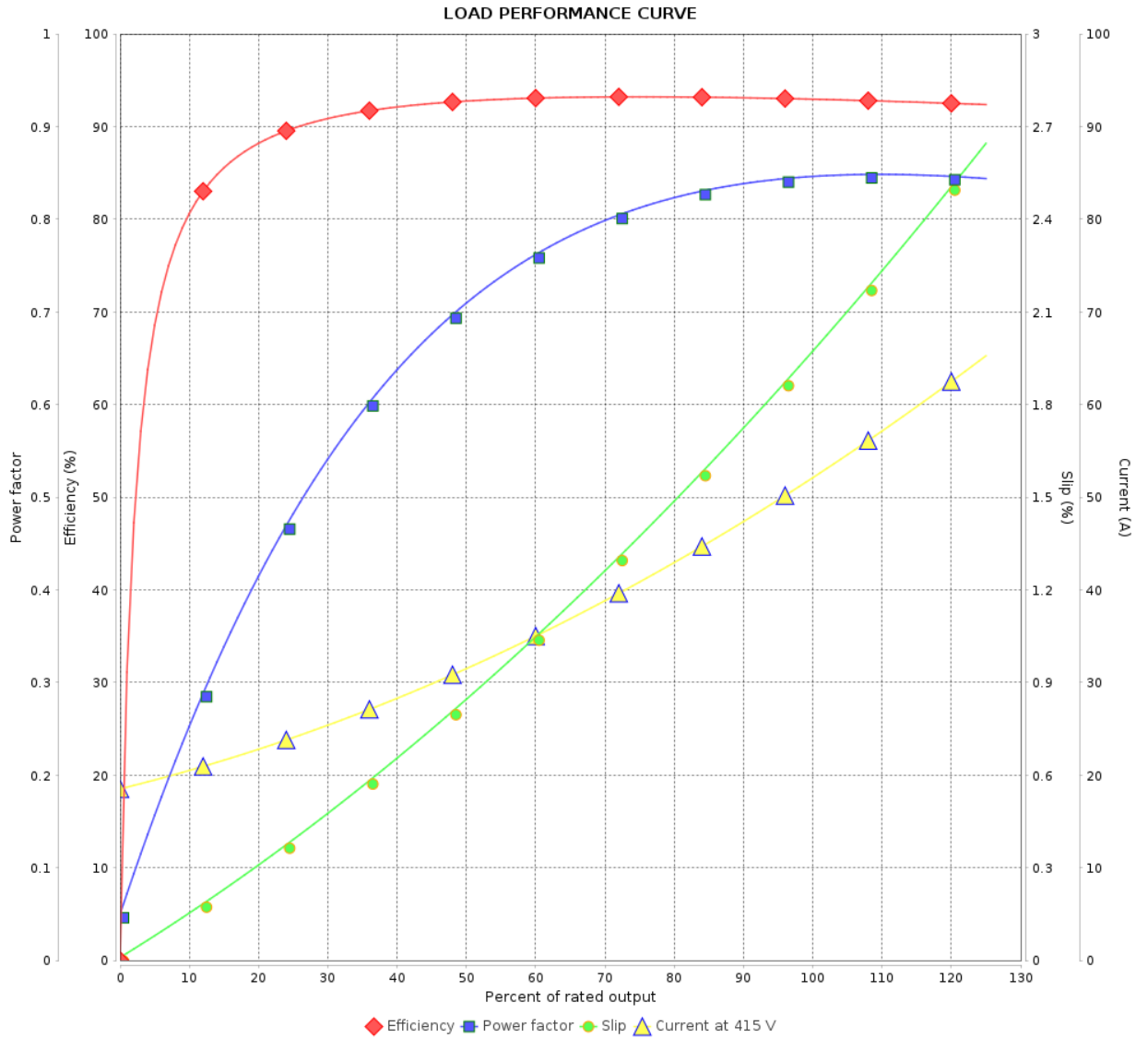
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 11943059



Performance : 415 V 50 Hz 4P IE2

Rated current : 52.8 A
 LRC : 6.0
 Rated torque : 19.7 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 229 %
 Rated speed : 1470 rpm

Moment of inertia (J) : 0.3861 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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