

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :								
Product line		: W22 NEMA Premium Efficiency Three-Phase			Product code :		11441852	
Frame : 143/5T Insulation class : F Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : B				Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>3</sup> : 24.1 kg Moment of inertia (J) : 0.0067 kgm <sup>2</sup>				
Output [HP]	1	0.75	0.75	0.75	1	1	1	
Poles	6	6	6	6	6	6	6	
Frequency [Hz]	60	50	50	50	50	50	50	
Rated voltage [V]	230/460	380	400	415	380	400	415	
Rated current [A]	3.46/1.73	1.60	1.62	1.66	1.96	1.94	1.95	
L. R. Amperes [A]	21.5/10.7	9.28	9.88	10.5	9.41	10.1	10.7	
LRC [A]	6.2x(Code K)	5.8x(Code K)	6.1x(Code L)	6.3x(Code M)	4.8x(Code G)	5.2x(Code H)	5.5x(Code J)	
No load current [A]	2.20/1.10	1.05	1.15	1.25	1.05	1.15	1.25	
Rated speed [RPM]	1160	960	970	970	940	950	950	
Slip [%]	3.33	4.00	3.00	3.00	6.00	5.00	5.00	
Rated torque [kgfm]	0.626	0.567	0.561	0.561	0.772	0.764	0.764	
Locked rotor torque [%]	260	280	300	320	200	229	250	
Breakdown torque [%]	300	310	330	340	220	260	280	
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	80 K	80 K	80 K	
Locked rotor time	50s (cold) 28s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level <sup>2</sup>	50.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)	45.0 dB(A)	
Efficiency (%)	25%							
	50%	77.0	74.8	73.2	70.7	77.0	74.0	
	75%	82.0	78.4	77.5	75.8	80.0	78.5	
	100%	82.5	79.3	78.9	77.9	78.5	78.5	
Power Factor	25%							
	50%	0.45	0.44	0.41	0.38	0.53	0.46	
	75%	0.57	0.57	0.53	0.50	0.66	0.59	
	100%	0.66	0.66	0.62	0.59	0.74	0.68	
Losses at normative operating points (speed;torque), in percentage of rated output power								
Losses (%)	P1 (0,9;1,0)	20.0	20.0	20.0	20.0	20.0	20.0	
	P2 (0,5;1,0)	16.7	16.7	16.7	16.7	16.7	16.7	
	P3 (0,25;1,0)	16.9	16.9	16.9	16.9	16.9	16.9	
	P4 (0,9;0,5)	12.6	12.6	12.6	12.6	12.6	12.6	
	P5 (0,5;0,5)	9.2	9.2	9.2	9.2	9.2	9.2	
	P6 (0,5;0,25)	7.6	7.6	7.6	7.6	7.6	7.6	
	P7 (0,25;0,25)	5.8	5.8	5.8	5.8	5.8	5.8	
Bearing type	: Drive end : 6205 ZZ	Non drive end : 6204 ZZ		Foundation loads				
Sealing	: V'Ring	V'Ring		Max. traction		: 49 kgf		
Lubrication interval	: -	-		Max. compression		: 73 kgf		
Lubricant amount	: -	-						
Lubricant type	: Mobil Polyrex EM							
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end.				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 : \_\_\_\_\_

Notes  
USABLE @208V 3.82A SF 1.15 SFA 4.39A

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# LOAD PERFORMANCE CURVE

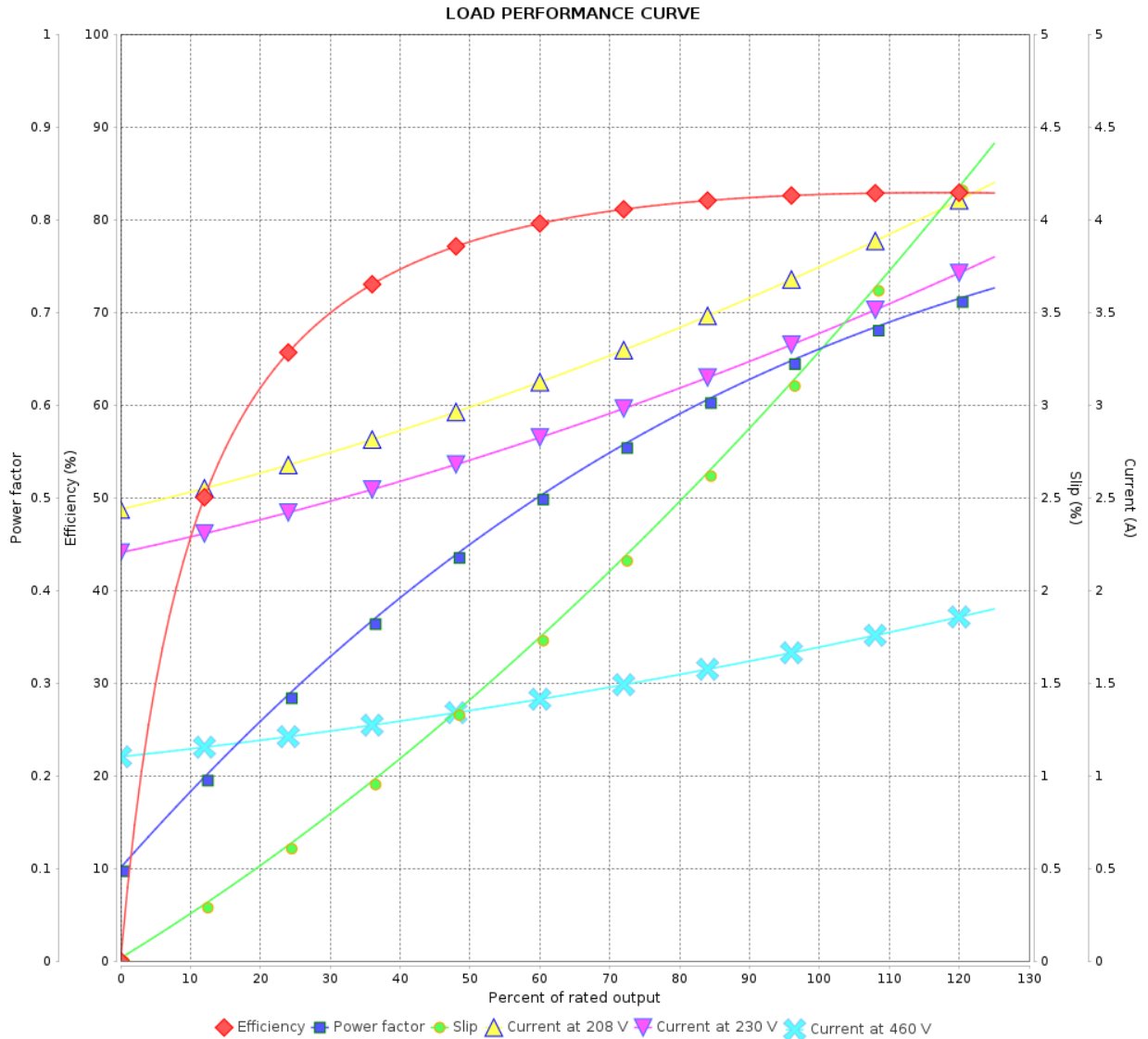
## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency  
Three-Phase

Product code : 11441852



Performance : 230/460 V 60 Hz 6P

Rated current : 3.46/1.73 A  
 LRC : 6.2  
 Rated torque : 0.626 kgfm  
 Locked rotor torque : 260 %  
 Breakdown torque : 300 %  
 Rated speed : 1160 rpm

Moment of inertia (J) : 0.0067 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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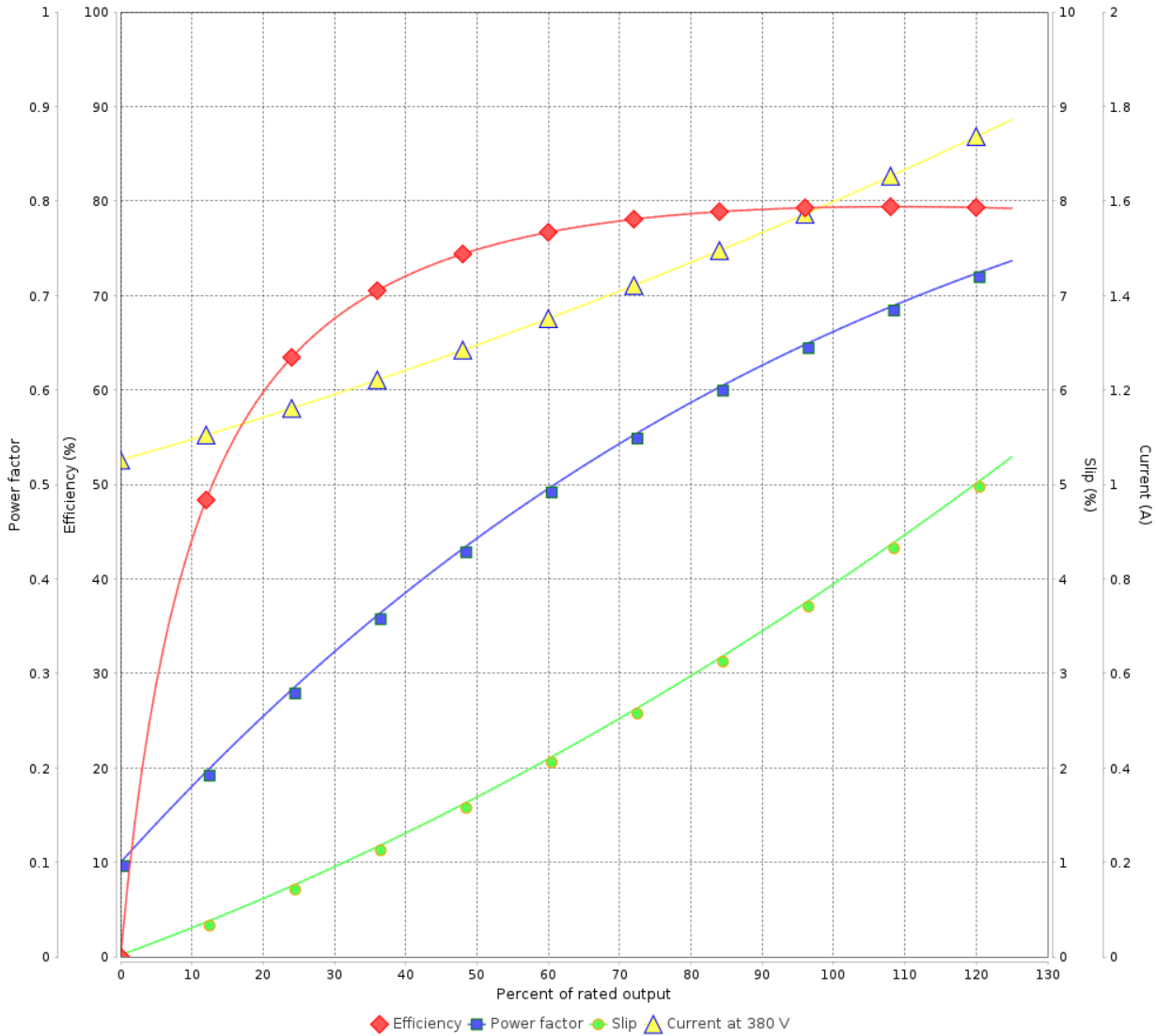
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11441852

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Performance : 380 V 50 Hz 6P IE3

Rated current	: 1.60 A	Moment of inertia (J)	: 0.0067 kgm <sup>2</sup>
LRC	: 5.8	Duty cycle	: Cont.(S1)
Rated torque	: 0.567 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 960 rpm	Design	: B

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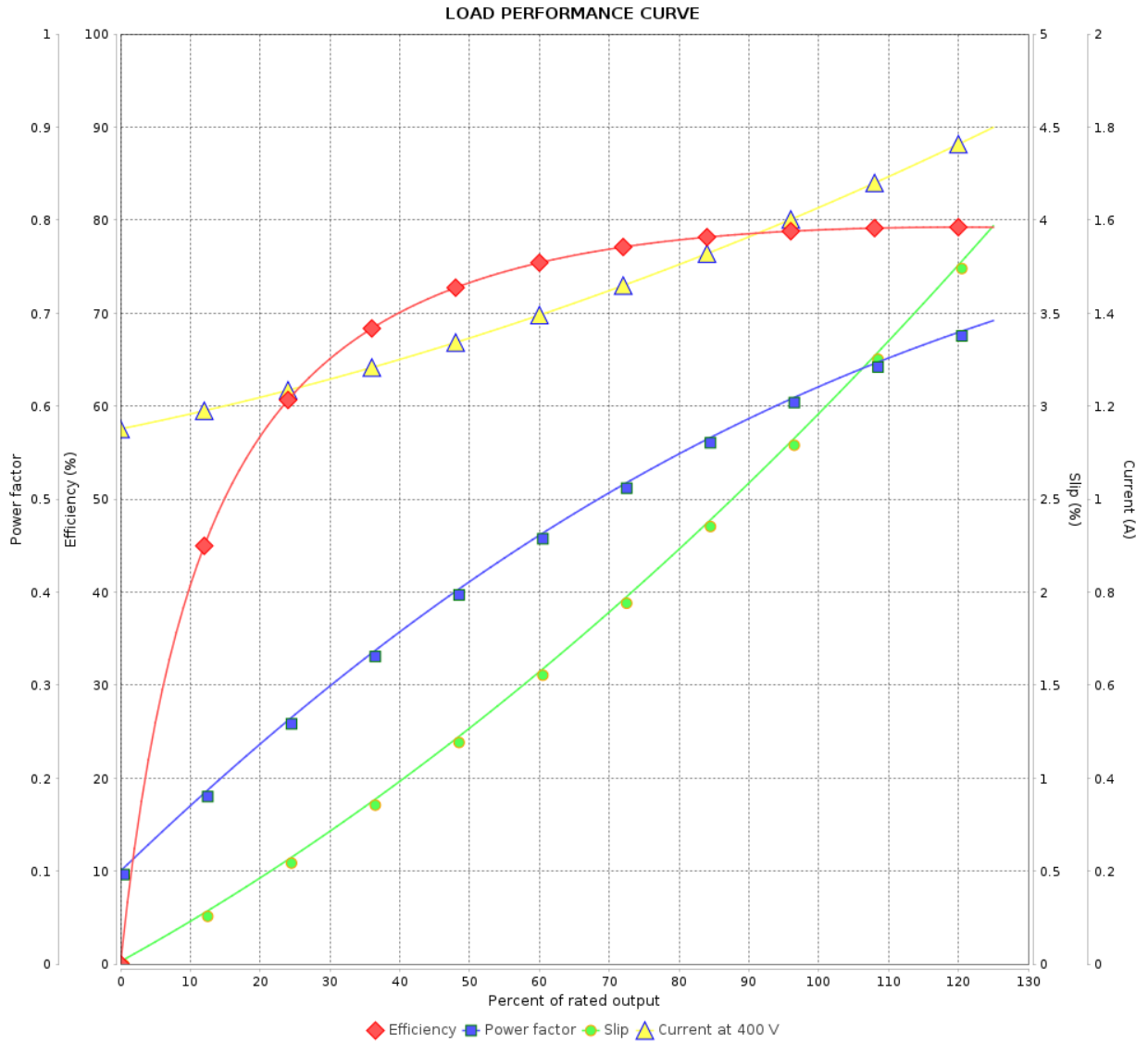
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11441852



Performance : 400 V 50 Hz 6P IE3

Rated current : 1.62 A  
 LRC : 6.1  
 Rated torque : 0.561 kgfm  
 Locked rotor torque : 300 %  
 Breakdown torque : 330 %  
 Rated speed : 970 rpm

Moment of inertia (J) : 0.0067 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

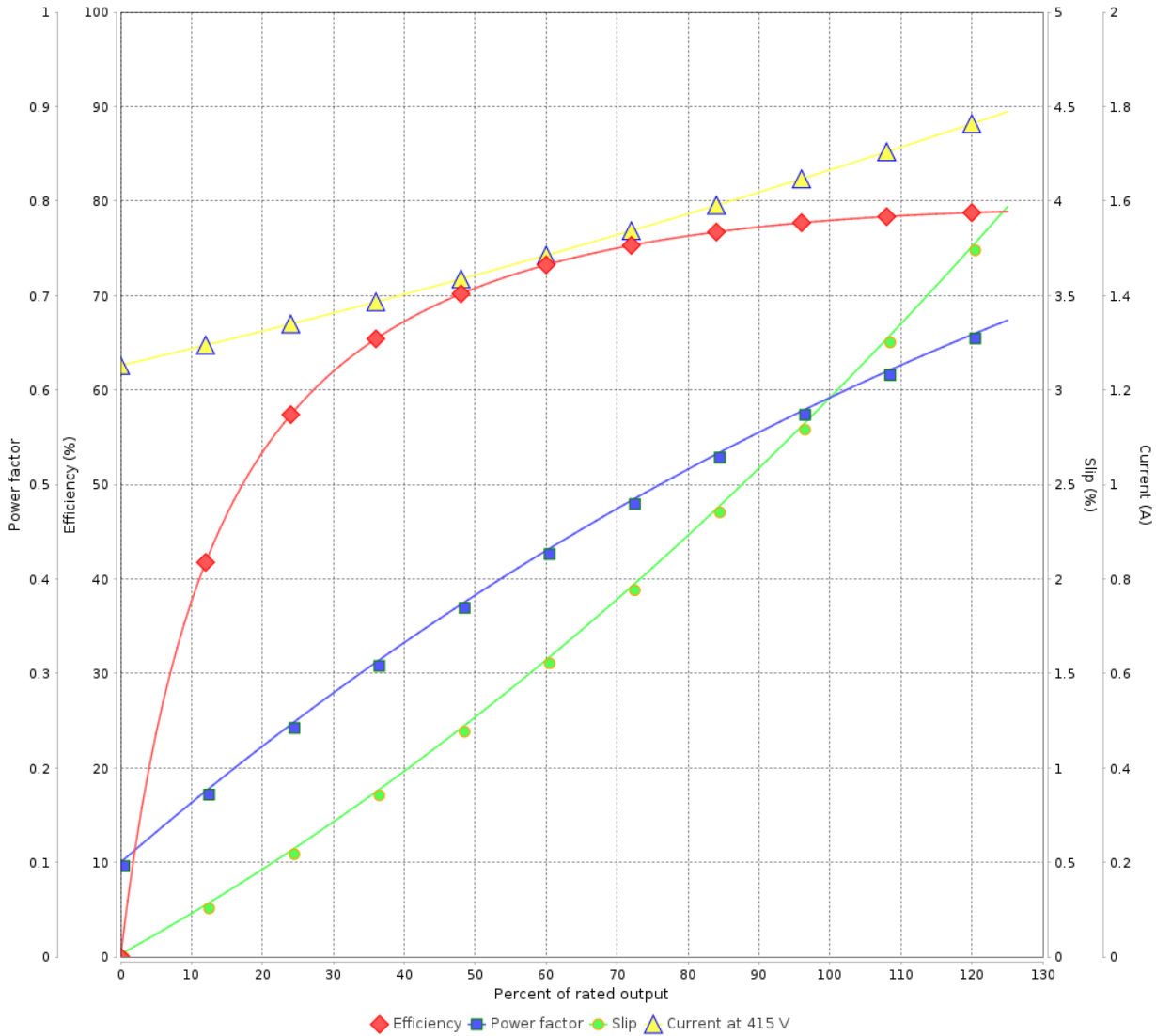
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11441852

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Performance : 415 V 50 Hz 6P IE3

Rated current	: 1.66 A	Moment of inertia (J)	: 0.0067 kgm <sup>2</sup>
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 0.561 kgfm	Insulation class	: F
Locked rotor torque	: 320 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 970 rpm	Design	: B

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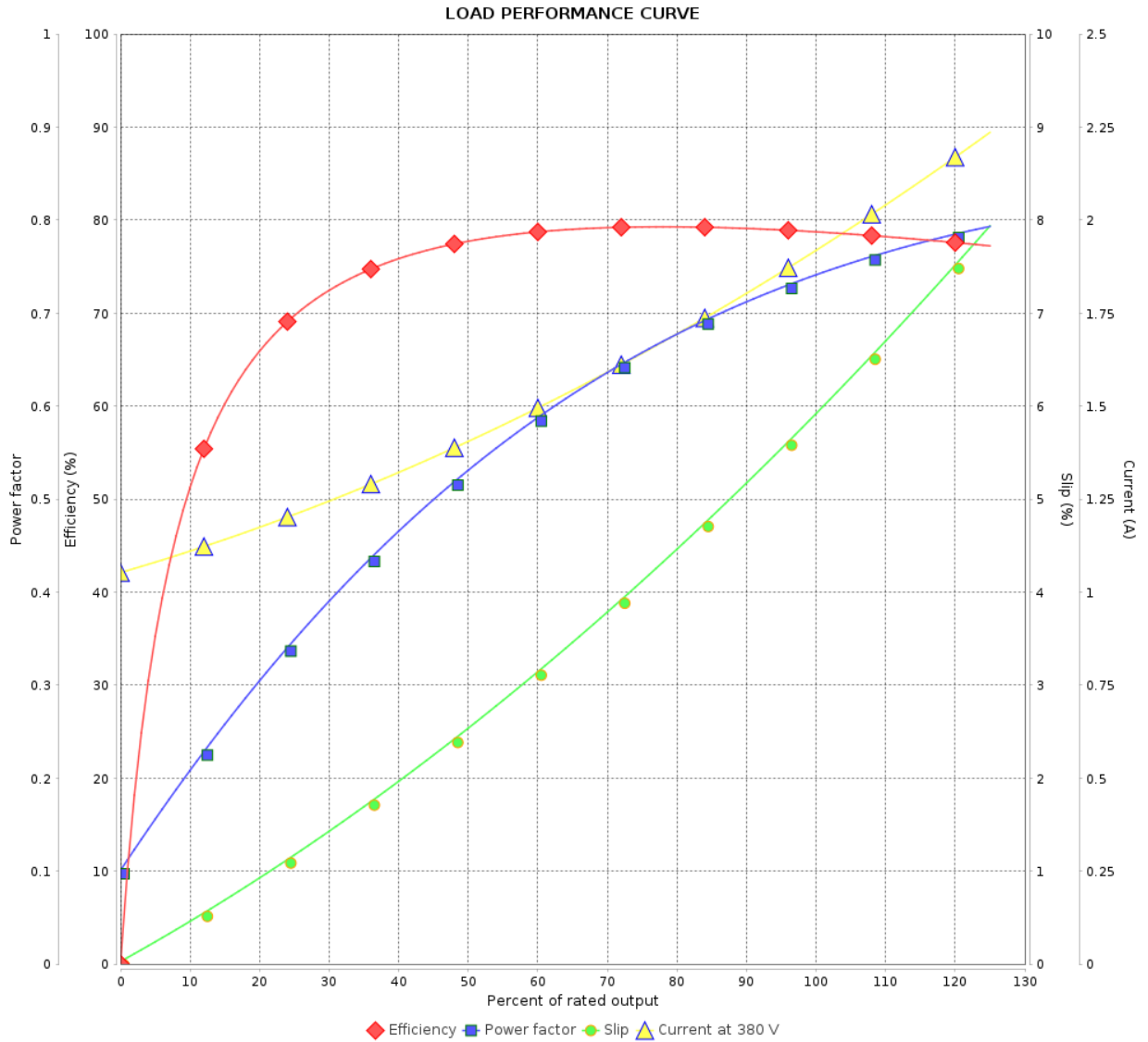
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11441852



Performance : 380 V 50 Hz 6P IE2

Rated current	: 1.96 A	Moment of inertia (J)	: 0.0067 kgm <sup>2</sup>
LRC	: 4.8	Duty cycle	: Cont.(S1)
Rated torque	: 0.772 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.00
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 940 rpm	Design	: B

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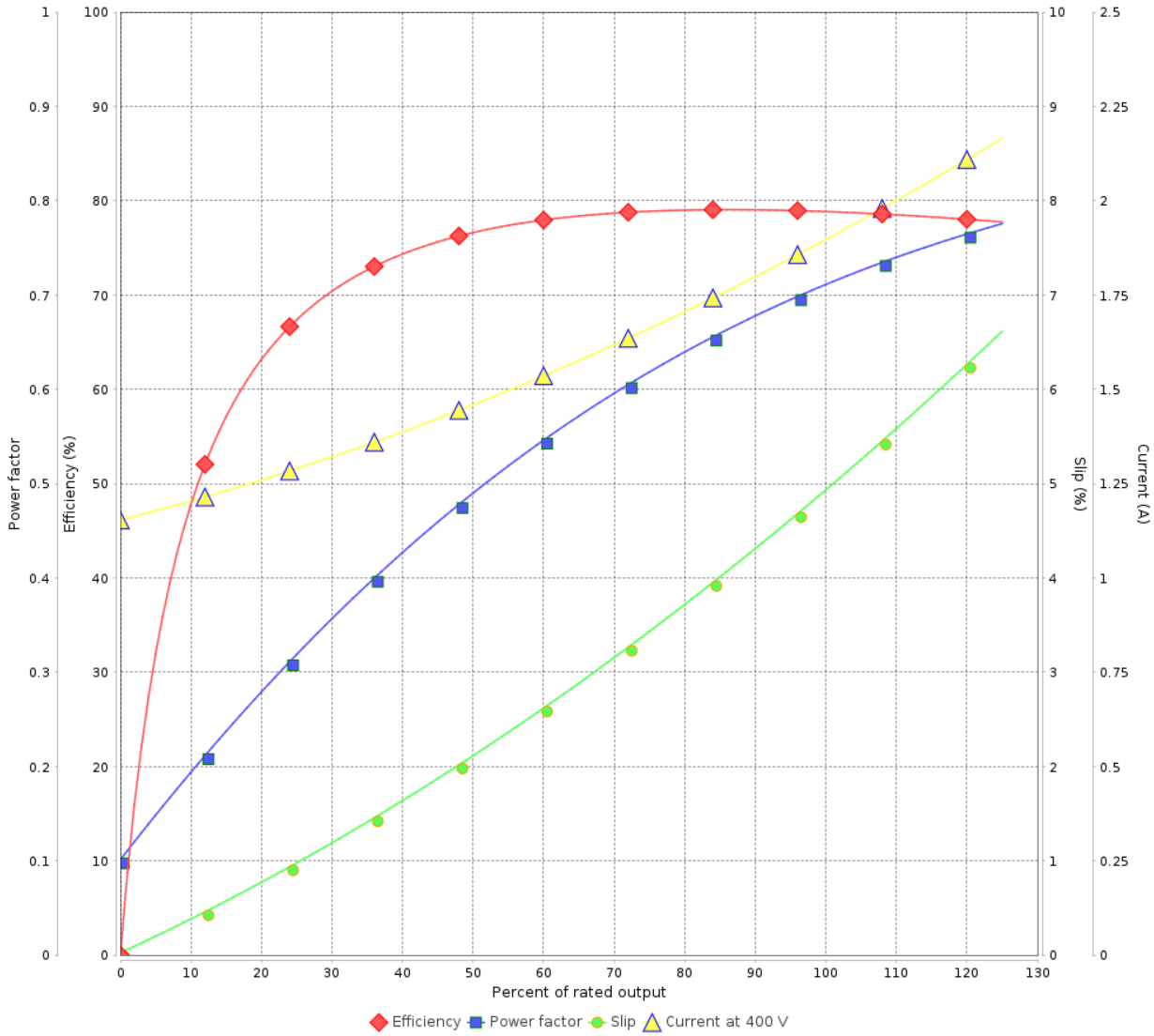
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase      Product code : 11441852

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Performance : 400 V 50 Hz 6P IE2

Rated current	: 1.94 A	Moment of inertia (J)	: 0.0067 kgm <sup>2</sup>
LRC	: 5.2	Duty cycle	: Cont.(S1)
Rated torque	: 0.764 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 950 rpm	Design	: B

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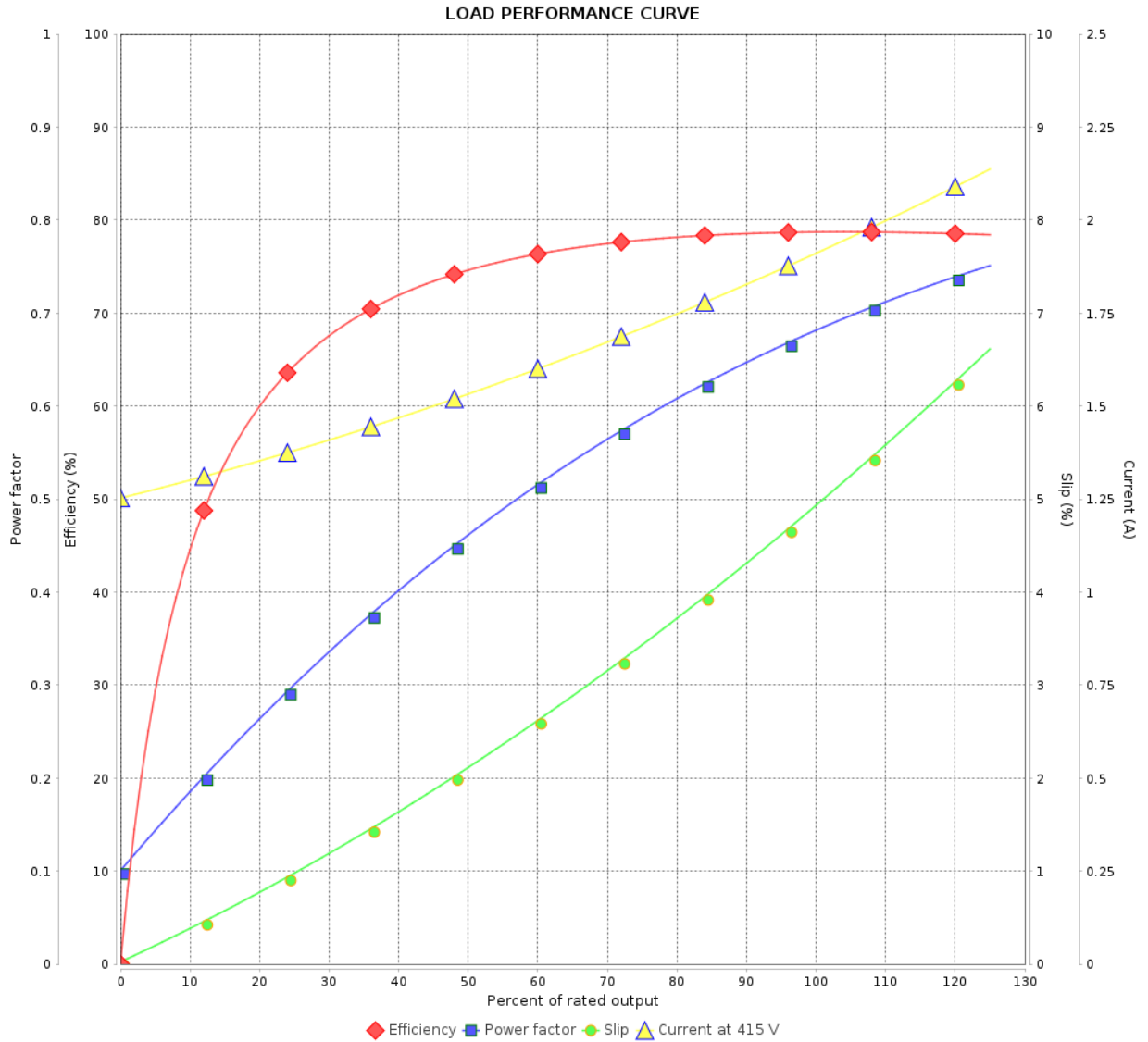
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11441852



Performance : 415 V 50 Hz 6P IE2

Rated current : 1.95 A  
 LRC : 5.5  
 Rated torque : 0.764 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 280 %  
 Rated speed : 950 rpm

Moment of inertia (J) : 0.0067 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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