

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer							
Product line		: W22 IEEE 841 NEMA Premium Efficiency Three-Phase			Product code :		11940579
Frame	: 213/5T	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			: 82.3 kg		
Protection degree	: IP55	Moment of inertia (J)			: 0.0268 kgm ²		
Design	: B						
Output [HP]	10	7.5	7.5	7.5	10	10	10
Poles	2	2	2	2	2	2	2
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	460	380	400	415	380	400	415
Rated current [A]	11.6	10.5	10.2	9.91	14.1	13.6	13.1
L. R. Amperes [A]	83.5	83.0	88.7	90.2	79.0	87.0	90.4
LRC [A]	7.2x(Code H)	7.9x(Code J)	8.7x(Code K)	9.1x(Code K)	5.6x(Code F)	6.4x(Code G)	6.9x(Code H)
No load current [A]	3.60	3.50	3.70	4.00	3.50	3.70	4.00
Rated speed [RPM]	3520	2930	2940	2945	2880	2900	2910
Slip [%]	2.22	2.33	2.00	1.83	4.00	3.33	3.00
Rated torque [kgfm]	2.06	1.86	1.85	1.85	2.52	2.50	2.49
Locked rotor torque [%]	220	229	270	290	170	190	210
Breakdown torque [%]	290	300	340	360	220	250	270
Service factor	1.25	1.25	1.25	1.25	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	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)	21s (cold) 12s (hot)
Noise level ²	68.0 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%	89.5	88.6	88.4	87.7	89.5	89.5
	75%	90.2	89.6	89.6	89.5	89.5	89.5
	100%	90.2	89.5	89.5	89.8	88.5	88.5
Power Factor	25%						
	50%	0.79	0.75	0.72	0.70	0.83	0.81
	75%	0.87	0.86	0.83	0.81	0.90	0.88
	100%	0.90	0.89	0.87	0.86	0.91	0.90
Losses at normative operating points (speed;torque), in percentage of rated output power							
Losses (%)	P1 (0,9;1,0)	10.5	10.5	10.5	10.5	10.5	10.5
	P2 (0,5;1,0)	8.5	8.5	8.5	8.5	8.5	8.5
	P3 (0,25;1,0)	7.4	7.4	7.4	7.4	7.4	7.4
	P4 (0,9;0,5)	5.1	5.1	5.1	5.1	5.1	5.1
	P5 (0,5;0,5)	3.2	3.2	3.2	3.2	3.2	3.2
	P6 (0,5;0,25)	2.0	2.0	2.0	2.0	2.0	2.0
	P7 (0,25;0,25)	1.2	1.2	1.2	1.2	1.2	1.2
Bearing type	: Drive end : 6308 C3	Non drive end : 6207 C3		Foundation loads			
Sealing	: Taconite	Taconite		Max. traction		: 83 kgf	
	: Labyrinth	Labyrinth		Max. compression		: 165 kgf	
Lubrication interval	: 20000 h	20000 h					
Lubricant amount	: 11 g	7 g					
Lubricant type	: Mobil Polyrex EM						
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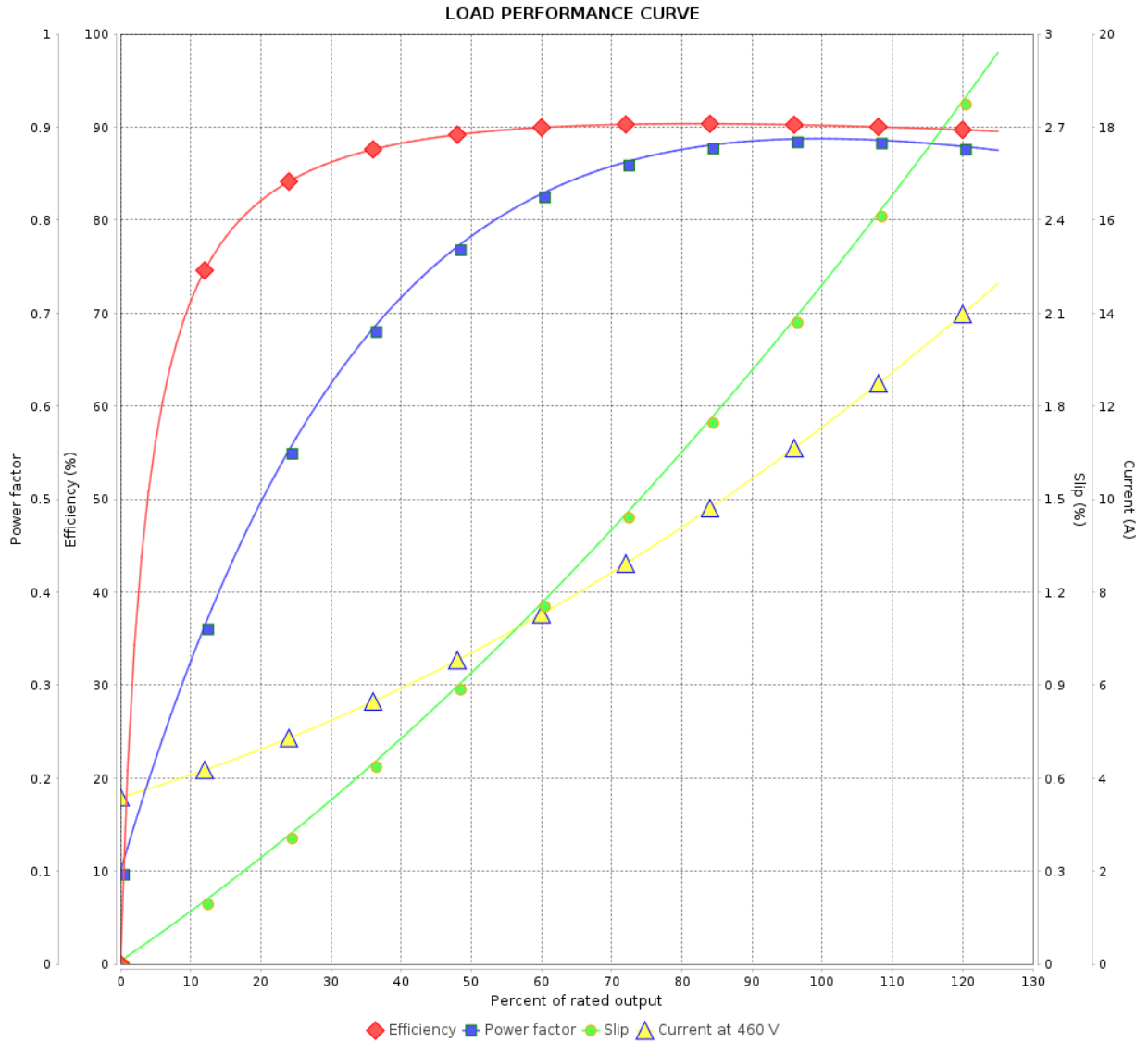
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11940579



Performance : 460 V 60 Hz 2P

Rated current : 11.6 A
 LRC : 7.2
 Rated torque : 2.06 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 290 %
 Rated speed : 3520 rpm

Moment of inertia (J) : 0.0268 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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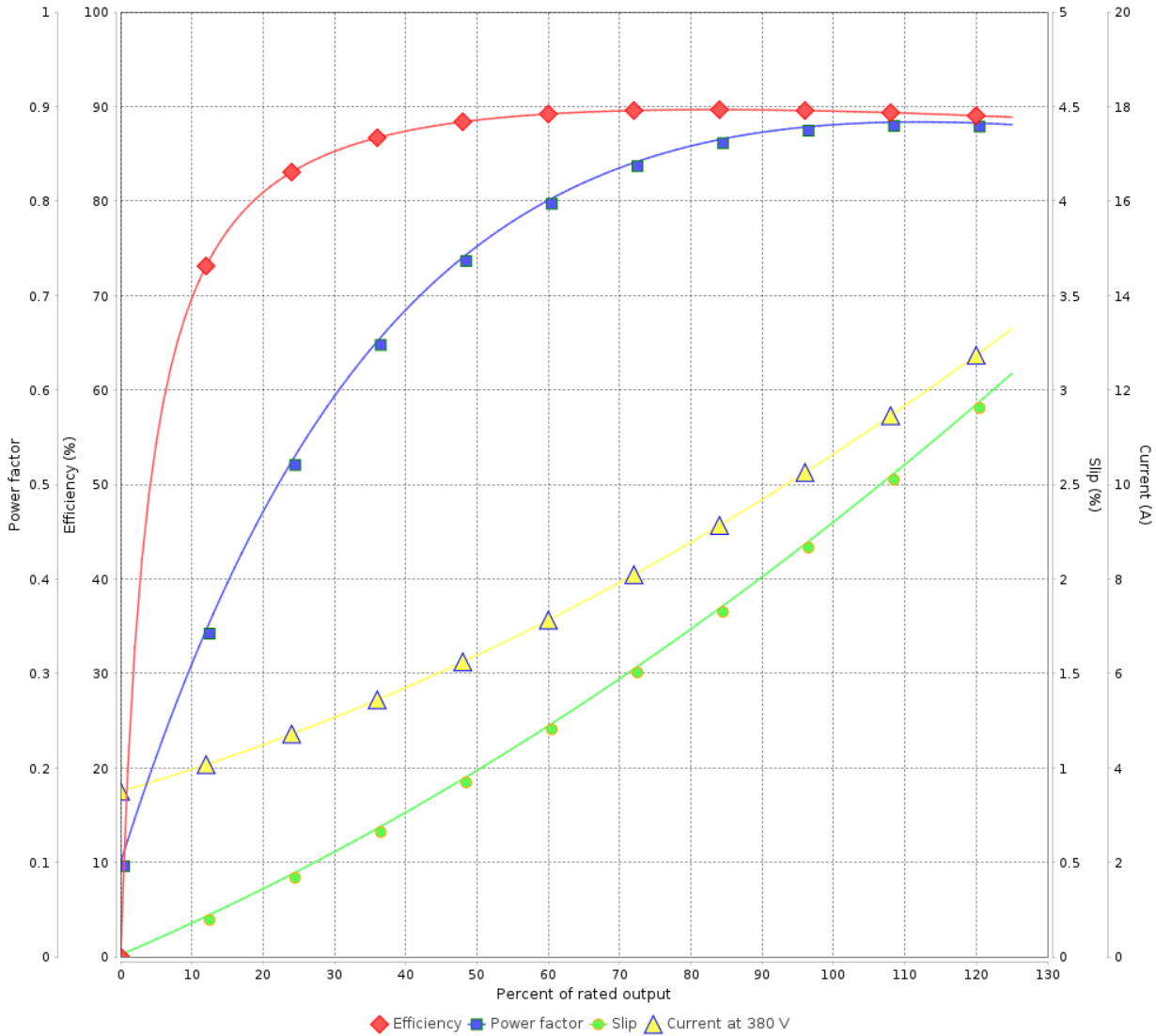
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11940579

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Performance : 380 V 50 Hz 2P IE3

Rated current	: 10.5 A	Moment of inertia (J)	: 0.0268 kgm ²
LRC	: 7.9	Duty cycle	: Cont.(S1)
Rated torque	: 1.86 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.25
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 2930 rpm	Design	: B

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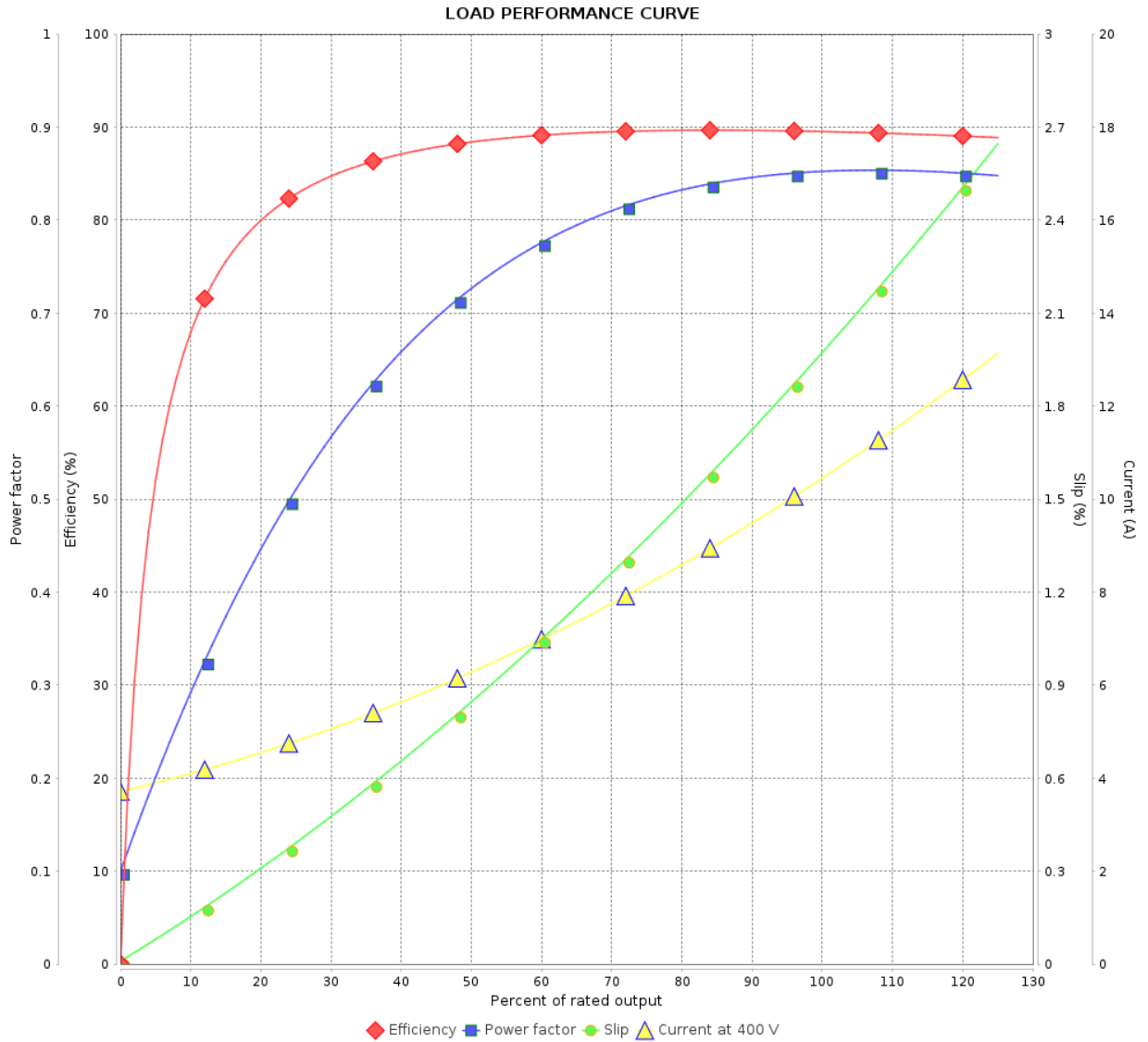
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Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 2P IE3

Rated current : 10.2 A
 LRC : 8.7
 Rated torque : 1.85 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 340 %
 Rated speed : 2940 rpm

Moment of inertia (J) : 0.0268 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.25
 Temperature rise : 80 K
 Design : B

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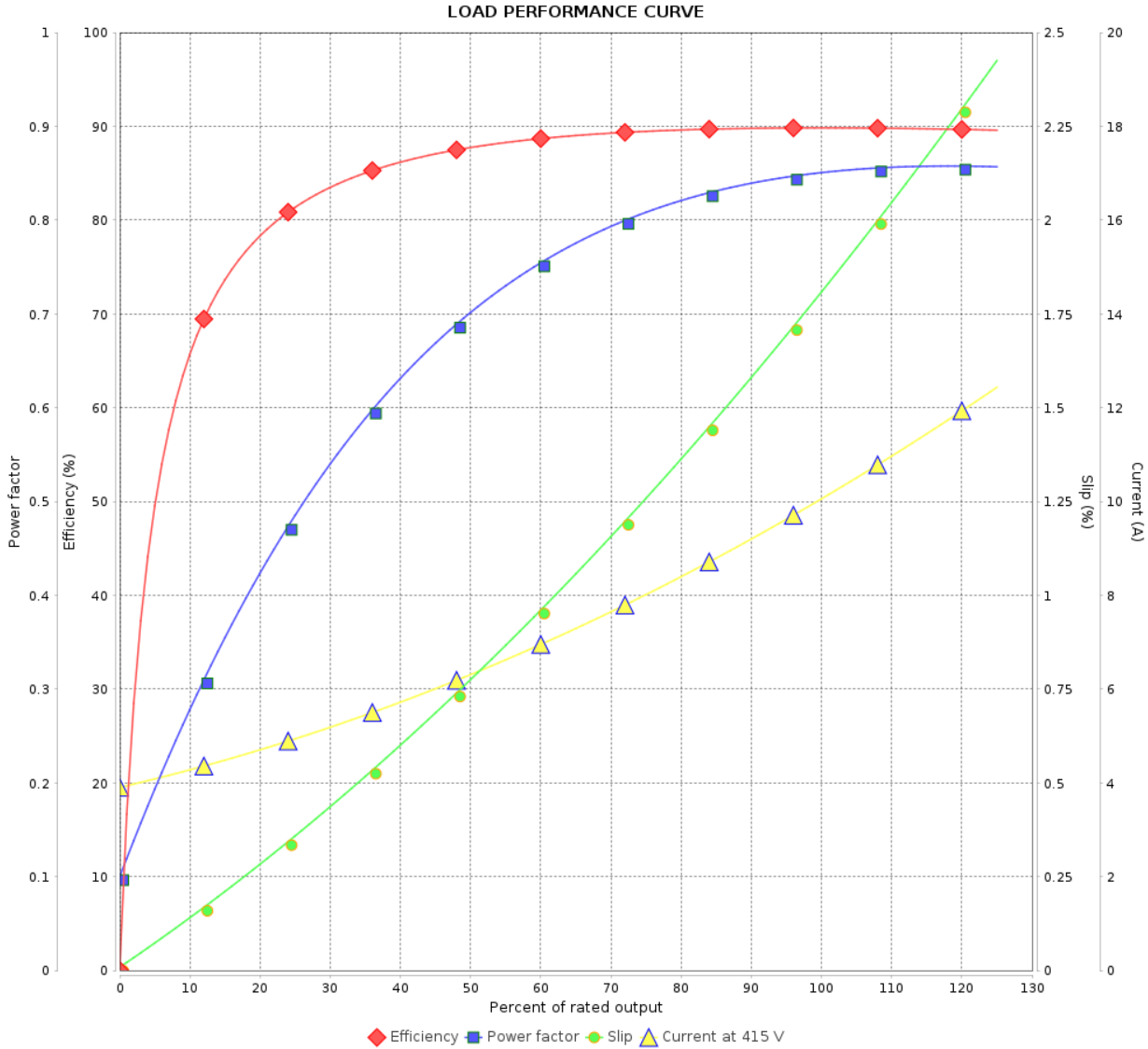
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Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11940579



Performance : 415 V 50 Hz 2P IE3

Rated current	: 9.91 A	Moment of inertia (J)	: 0.0268 kgm ²
LRC	: 9.1	Duty cycle	: Cont.(S1)
Rated torque	: 1.85 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.25
Breakdown torque	: 360 %	Temperature rise	: 80 K
Rated speed	: 2945 rpm	Design	: B

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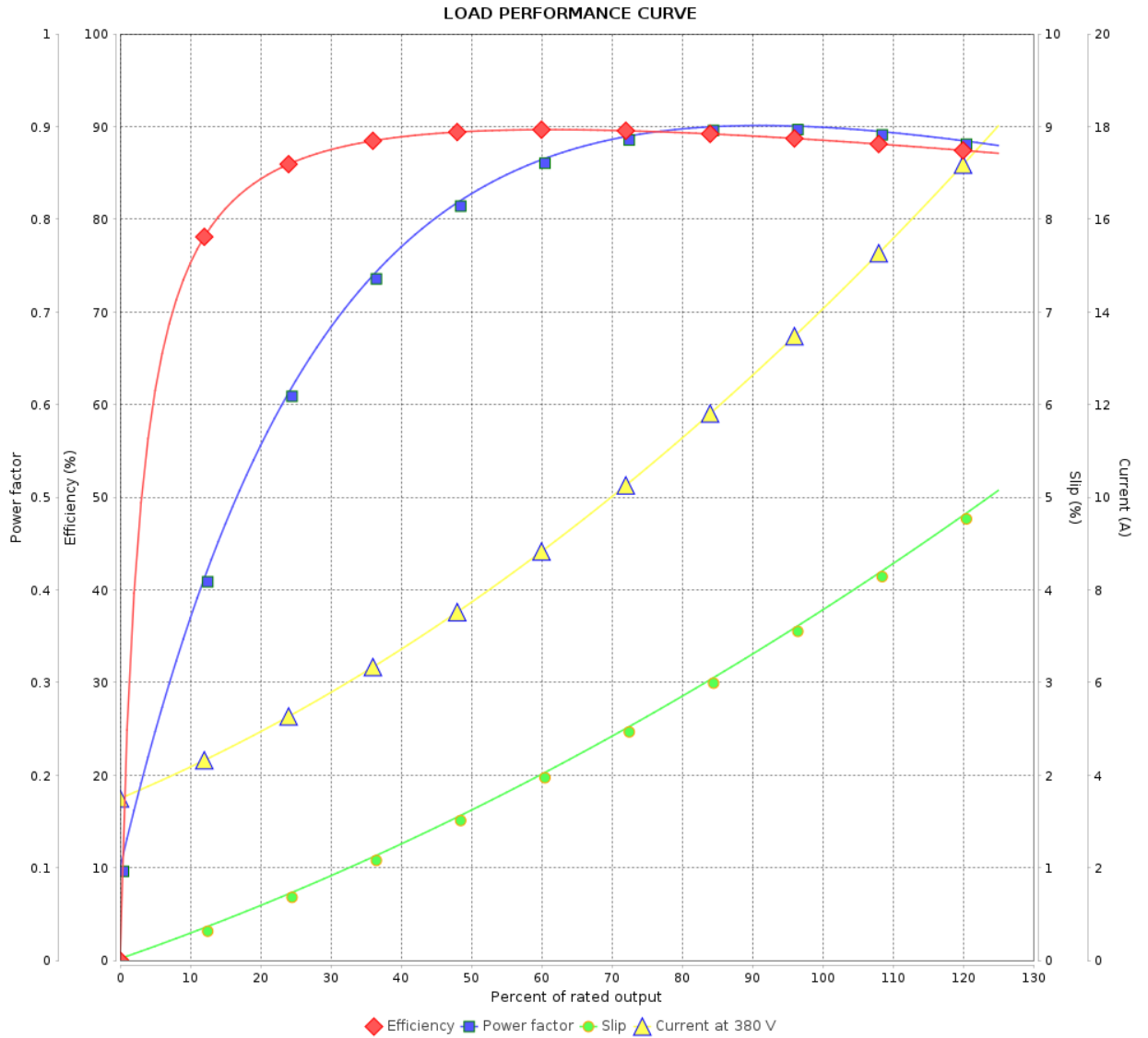
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11940579



Performance : 380 V 50 Hz 2P IE2

Rated current : 14.1 A
 LRC : 5.6
 Rated torque : 2.52 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 220 %
 Rated speed : 2880 rpm

Moment of inertia (J) : 0.0268 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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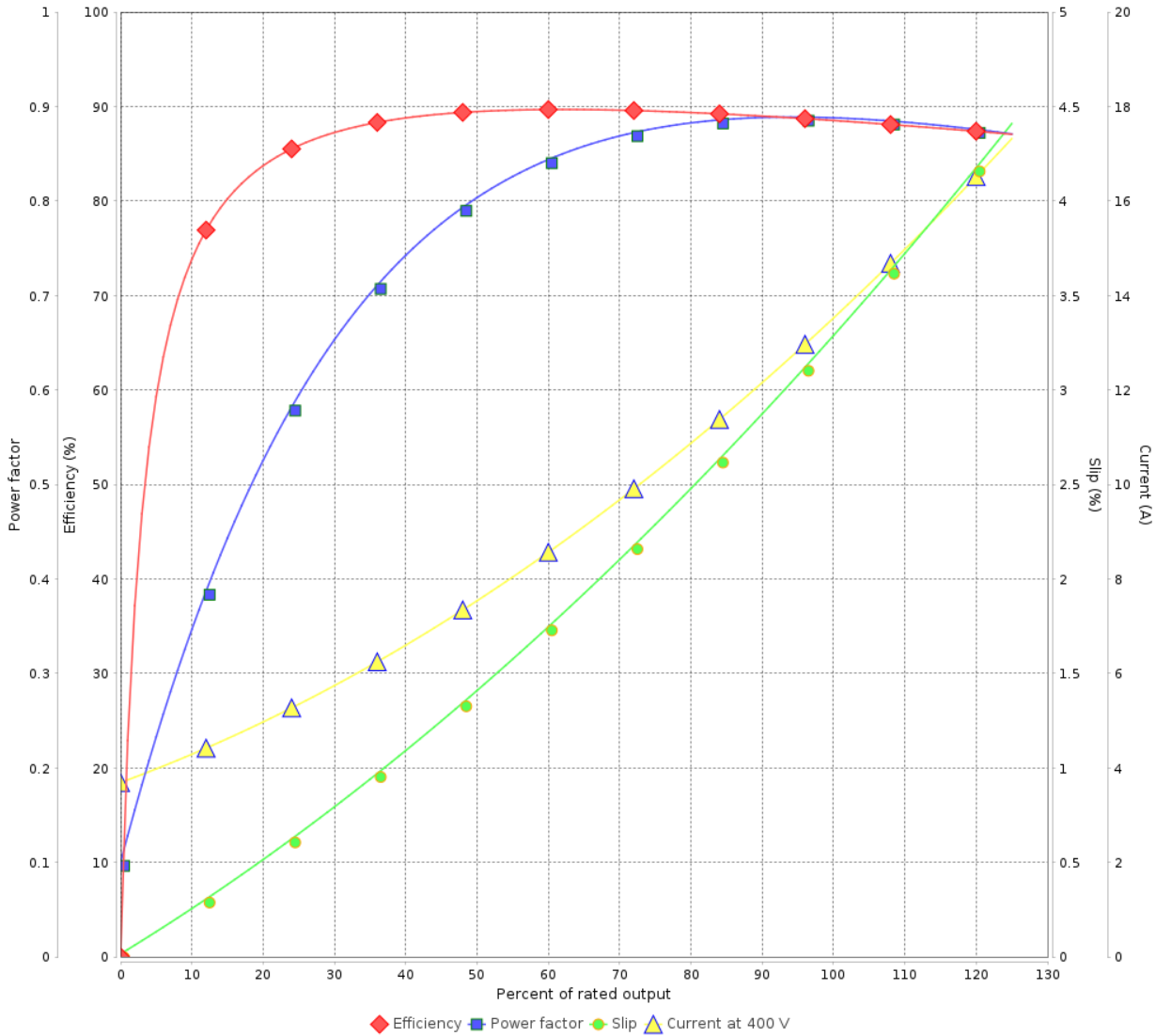
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Performance : 400 V 50 Hz 2P IE2

Rated current	: 13.6 A	Moment of inertia (J)	: 0.0268 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 2.50 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 250 %	Temperature rise	: 105 K
Rated speed	: 2900 rpm	Design	: B

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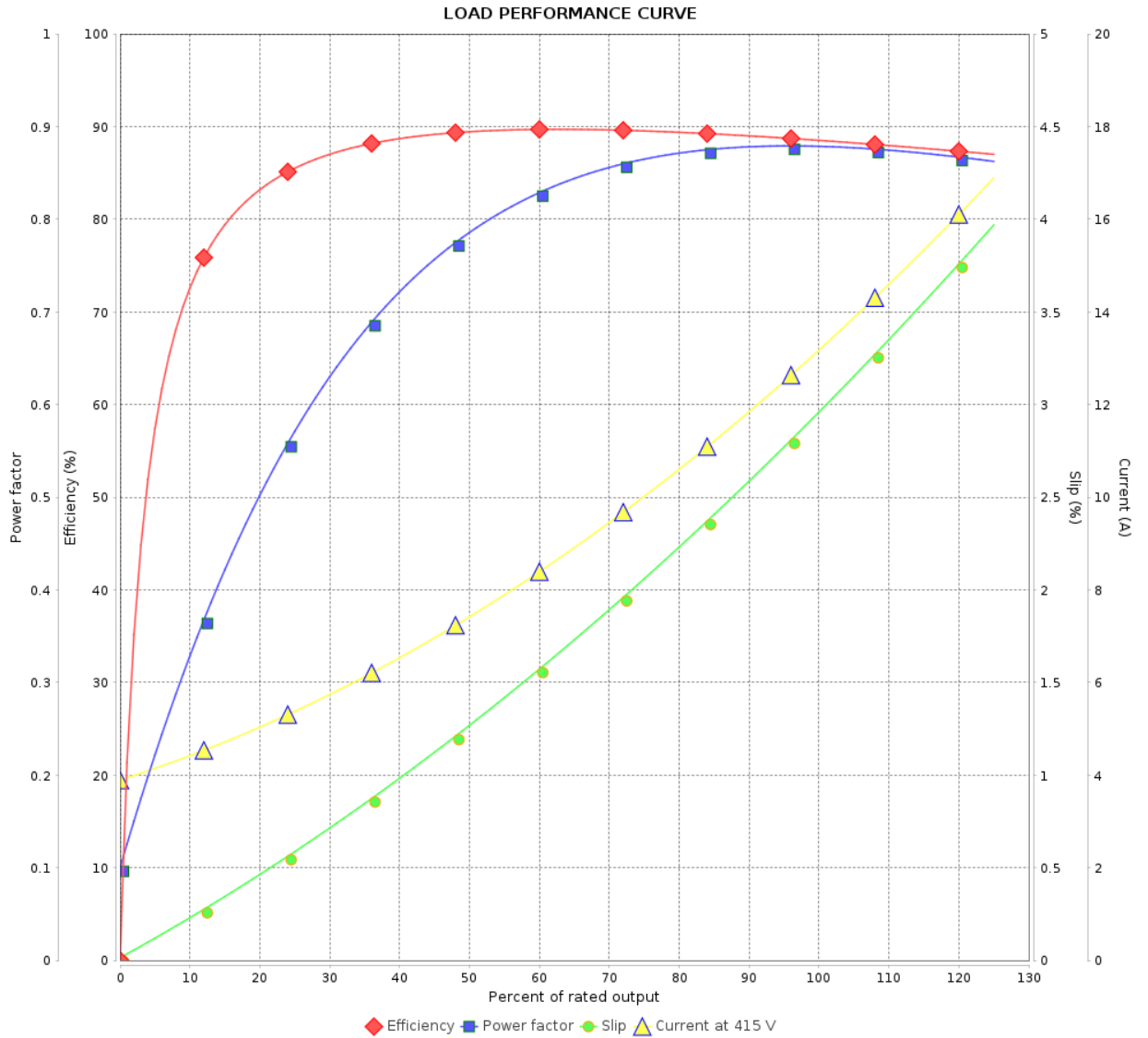
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 11940579



Performance : 415 V 50 Hz 2P IE2

Rated current : 13.1 A
 LRC : 6.9
 Rated torque : 2.49 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 270 %
 Rated speed : 2910 rpm

Moment of inertia (J) : 0.0268 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 105 K
 Design : B

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