

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	13161994		
Frame	: L447/9T	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	: 1476 kg		
Protection degree	: IP55	Moment of inertia (J)	: 5.75 kgm ²		
Design	: B				
Output [HP]	400	350	350	350	
Poles	4	4	4	4	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	460	380	400	415	
Rated current [A]	445	461	448	437	
L. R. Amperes [A]	2893	2766	3002	3146	
LRC [A]	6.5x(Code G)	6.0x(Code F)	6.7x(Code G)	7.2x(Code H)	
No load current [A]	125	125	140	155	
Rated speed [RPM]	1785	1485	1485	1485	
Slip [%]	0.83	1.00	1.00	1.00	
Rated torque [kgfm]	163	171	171	171	
Locked rotor torque [%]	250	229	250	280	
Breakdown torque [%]	260	240	270	290	
Service factor	1.15	1.15	1.15	1.15	
Temperature rise	80 K	105 K	80 K	80 K	
Locked rotor time	37s (cold) 21s (hot)	43s (cold) 24s (hot)	37s (cold) 21s (hot)	32s (cold) 18s (hot)	
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	
Efficiency (%)	25%				
	50%	95.4	95.8	95.4	
	75%	95.8	95.8	95.8	
	100%	96.2	96.2	96.2	
Power Factor	25%				
	50%	0.80	0.81	0.77	
	75%	0.85	0.86	0.84	
	100%	0.88	0.89	0.87	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	4.5	4.5	4.5	4.5
	P2 (0,5;1,0)	3.3	3.3	3.3	3.3
	P3 (0,25;1,0)	2.7	2.7	2.7	2.7
	P4 (0,9;0,5)	2.5	2.5	2.5	2.5
	P5 (0,5;0,5)	1.5	1.5	1.5	1.5
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6
Bearing type	: Drive end : NU-322 C3	Non drive end : 6319 C3	Foundation loads		
Sealing	: WSeal	WSeal	Max. traction	: 3601 kgf	
Lubrication interval	: 4000 h	8000 h	Max. compression	: 5077 kgf	
Lubricant amount	: 60 g	45 g			
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. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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Customer : _____

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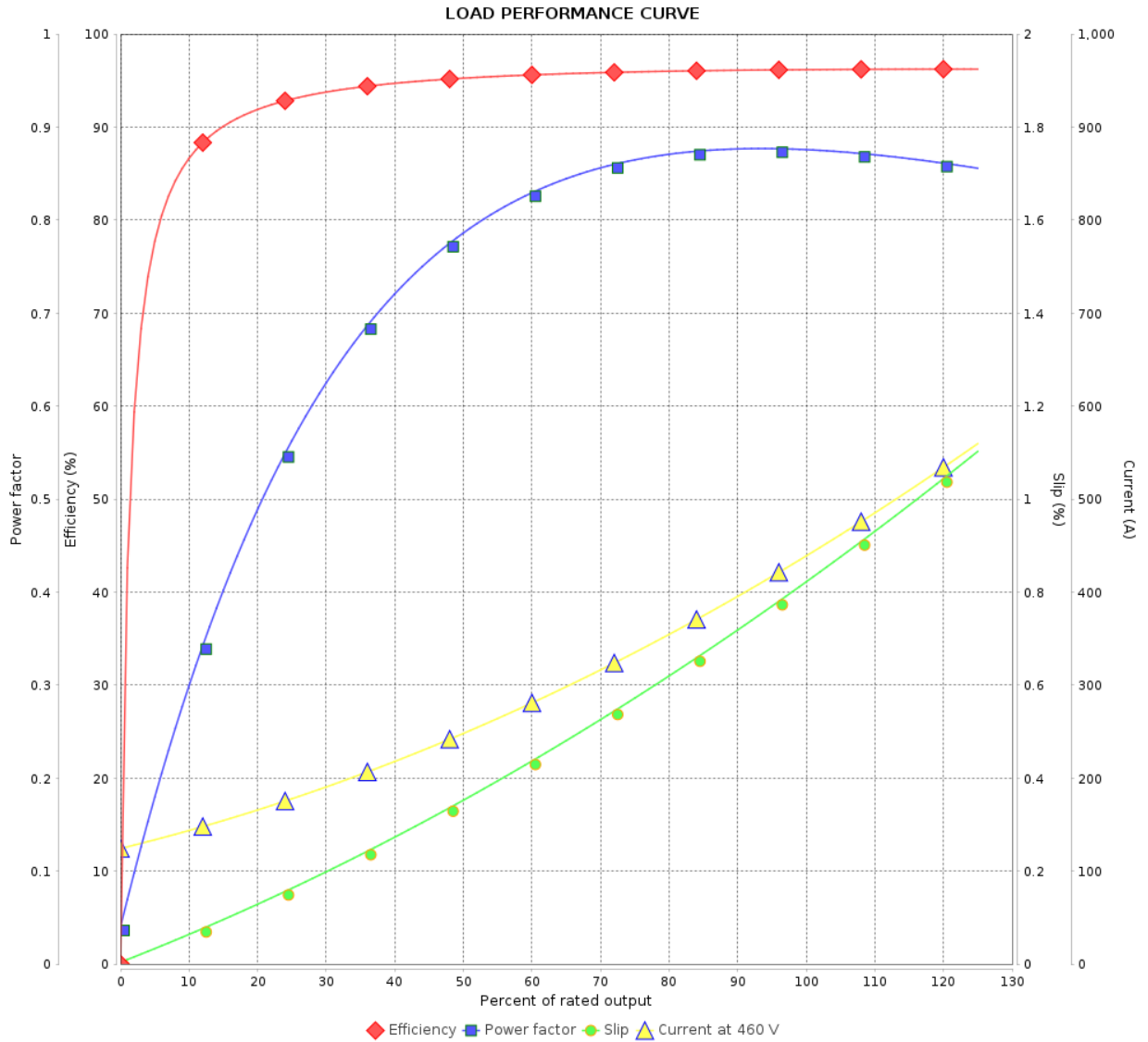
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13161994



Performance : 460 V 60 Hz 4P

Rated current : 445 A
 LRC : 6.5
 Rated torque : 163 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 260 %
 Rated speed : 1785 rpm

Moment of inertia (J) : 5.75 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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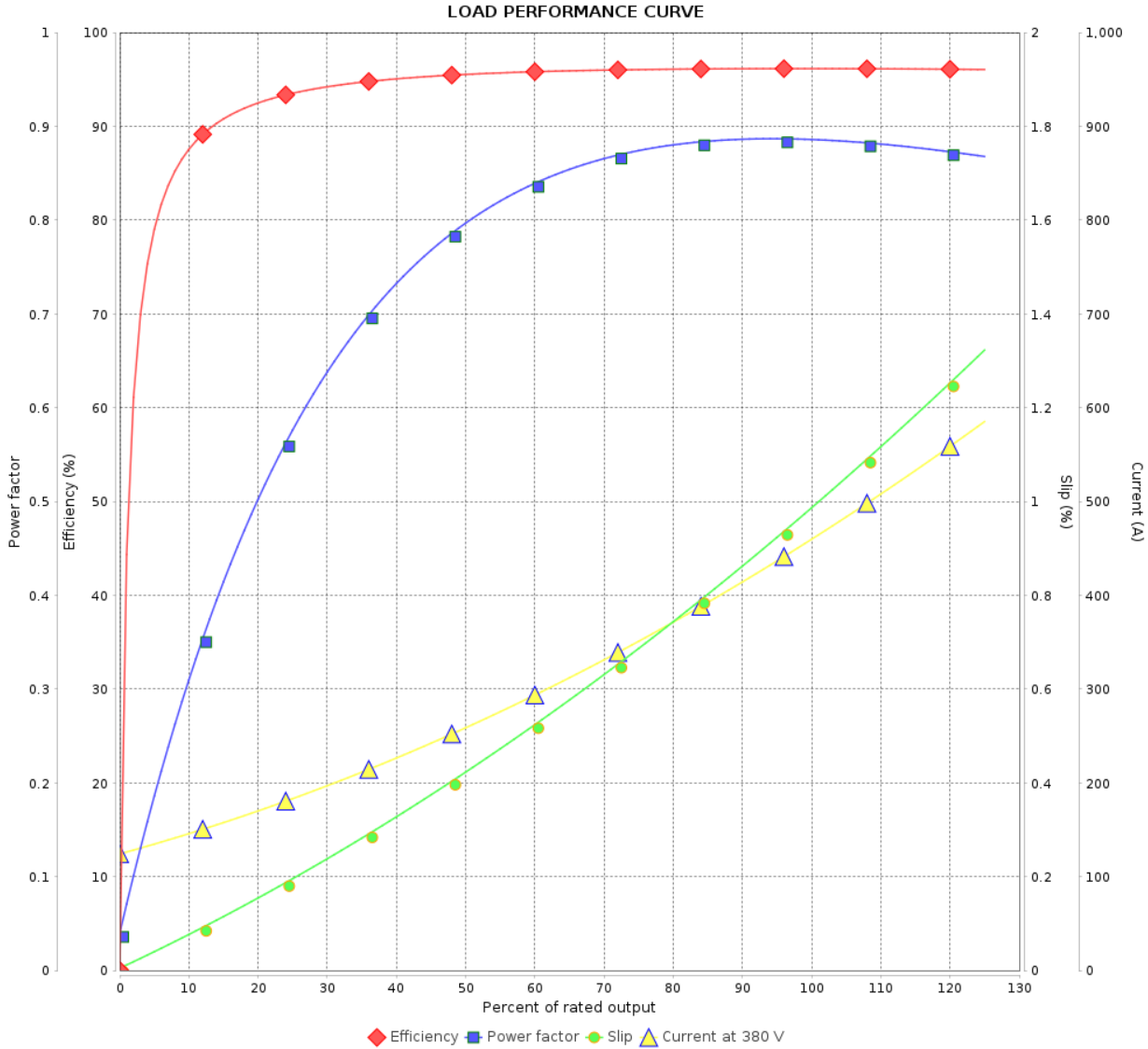
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13161994



Performance : 380 V 50 Hz 4P IE3

Rated current : 461 A
 LRC : 6.0
 Rated torque : 171 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 240 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 5.75 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 105 K
 Design : B

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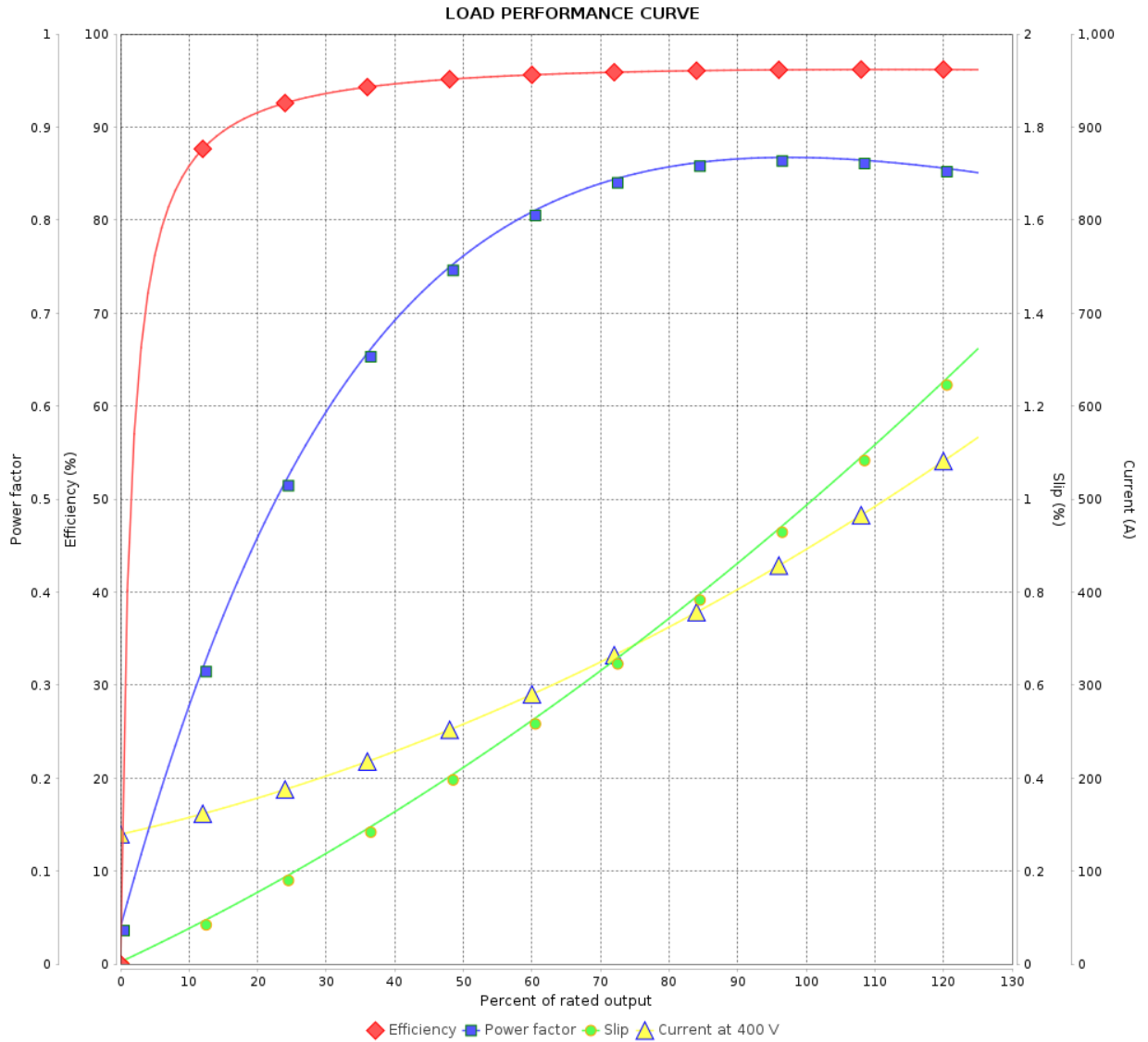
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13161994



Performance : 400 V 50 Hz 4P IE3

Rated current : 448 A
 LRC : 6.7
 Rated torque : 171 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 270 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 5.75 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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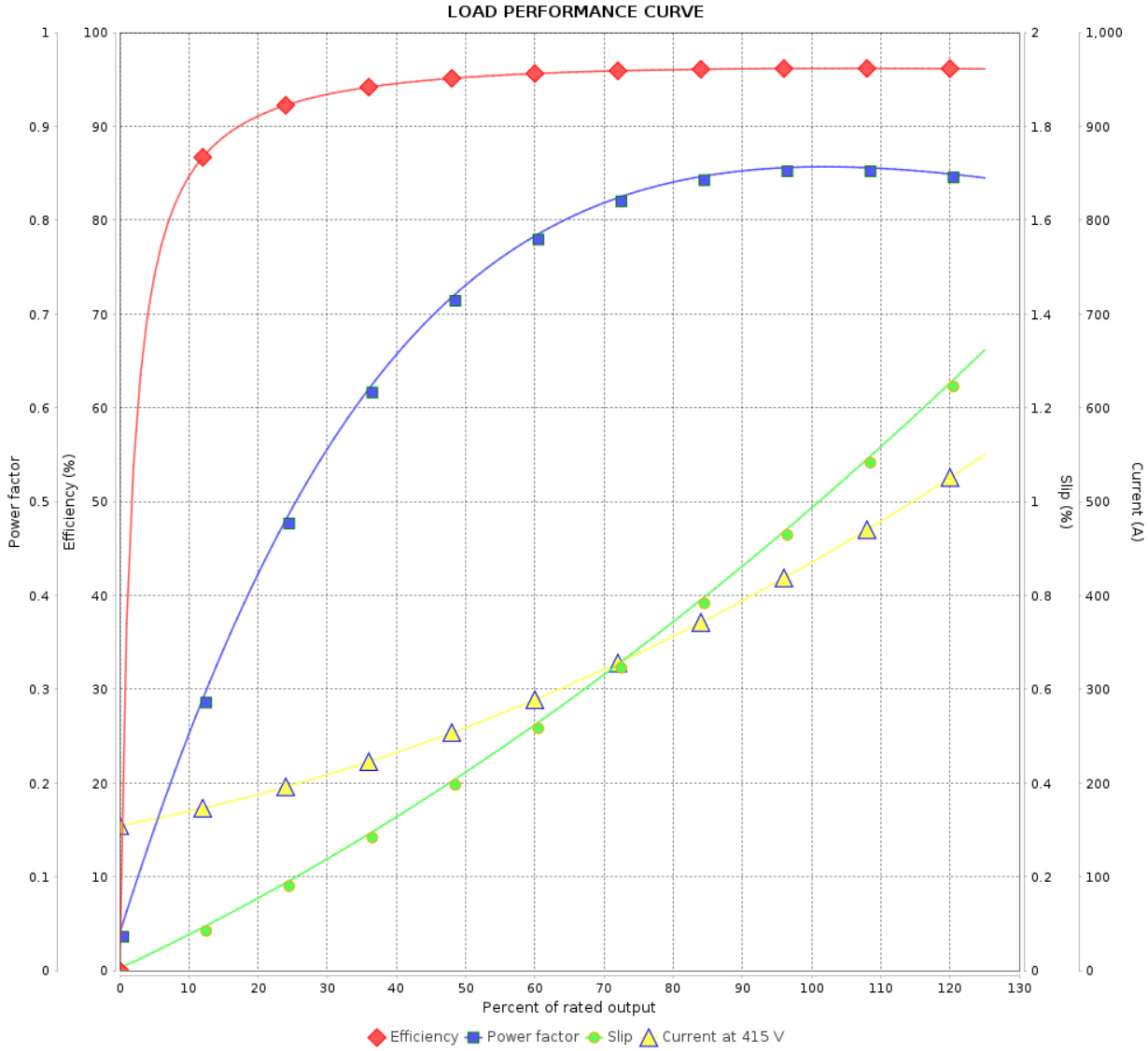
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13161994



Performance : 415 V 50 Hz 4P IE3

Rated current : 437 A
 LRC : 7.2
 Rated torque : 171 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 290 %
 Rated speed : 1485 rpm

Moment of inertia (J) : 5.75 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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