

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14180510			
Frame : 404/5T	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 ¹ : Both (CW and CCW)	
		Starting method : Direct On Line	Approx. weight ³ : 535 kg	Moment of inertia (J) : 1.55 kgm ²	
Output [HP]	60	50	50	50	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	141/70.3	70.4	67.6	65.6	
L. R. Amperes [A]	970/485	451	487	505	
LRC [A]	6.9x(Code H)	6.4x(Code G)	7.2x(Code H)	7.7x(Code J)	
No load current [A]	50.0/25.0	25.0	27.0	28.1	
Rated speed [RPM]	1185	985	985	990	
Slip [%]	1.25	1.50	1.50	1.00	
Rated torque [kgfm]	36.7	36.8	36.8	36.7	
Locked rotor torque [%]	250	229	260	280	
Breakdown torque [%]	270	260	280	310	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	52s (cold) 29s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	
Noise level ²	65.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	
Efficiency (%)	25%				
	50%	93.6	93.0	93.0	
	75%	94.5	94.0	94.0	
	100%	94.5	94.0	94.5	
Power Factor	25%				
	50%	0.73	0.73	0.70	
	75%	0.82	0.82	0.80	
	100%	0.85	0.85	0.84	
Bearing type	: Drive end : NU-217 C3	: Non drive end : 6314 C3	Foundation loads		
Sealing	: Oil Seal	: Lip Seal	Max. traction	: 850 kgf	
Lubrication interval	: 10272 h	: 14267 h	Max. compression	: 1385 kgf	
Lubricant amount	: 21 g	: 27 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 156A SF 1.00 SFA 156A					
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. (4) At 100% of full load.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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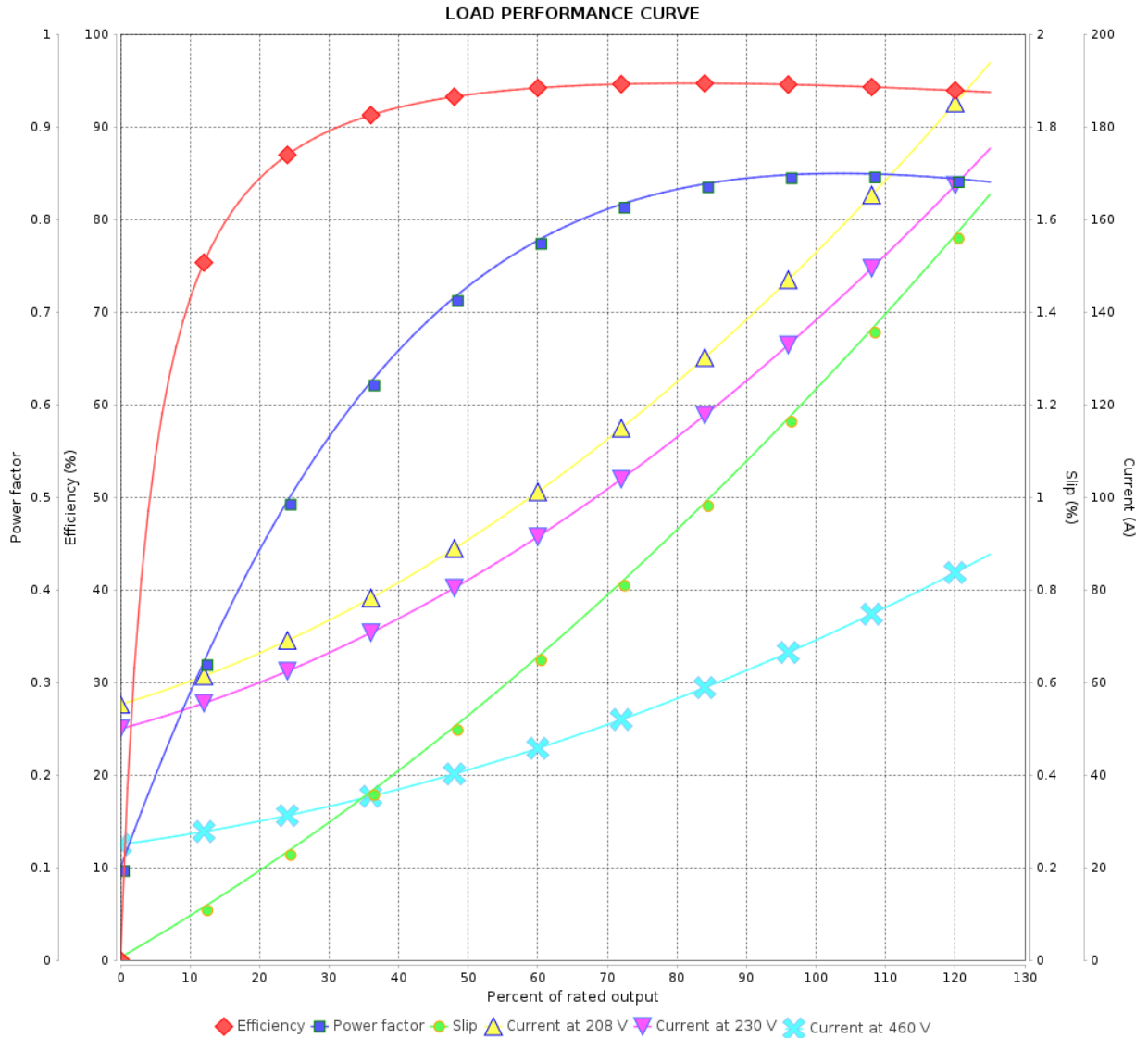
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14180510



Performance : 230/460 V 60 Hz 6P

Rated current : 141/70.3 A
 LRC : 6.9
 Rated torque : 36.7 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 270 %
 Rated speed : 1185 rpm

Moment of inertia (J) : 1.55 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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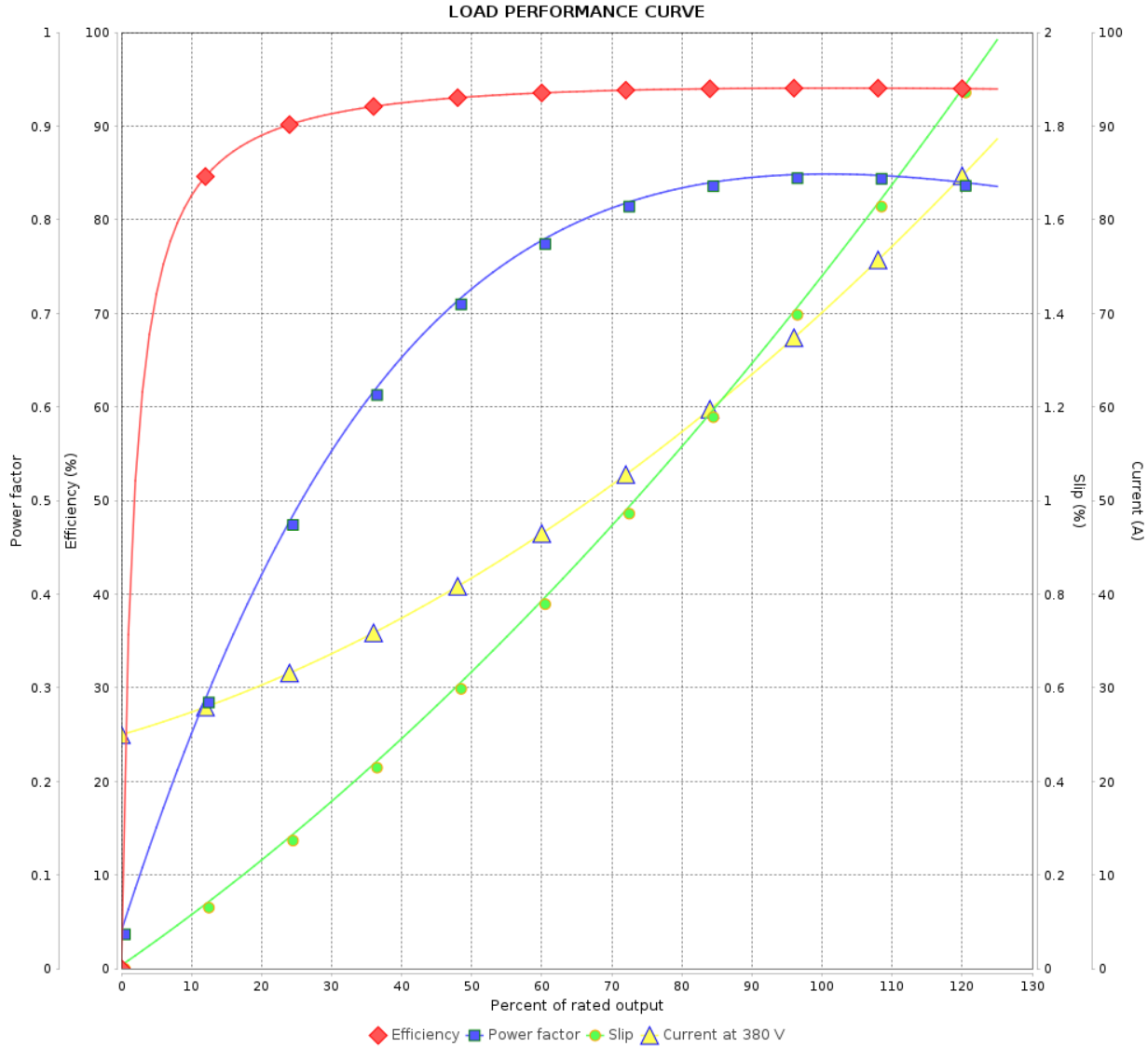
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14180510



Performance : 380 V 50 Hz 6P IE3

Rated current	: 70.4 A	Moment of inertia (J)	: 1.55 kgm ²
LRC	: 6.4	Duty cycle	: Cont.(S1)
Rated torque	: 36.8 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 985 rpm	Design	: B

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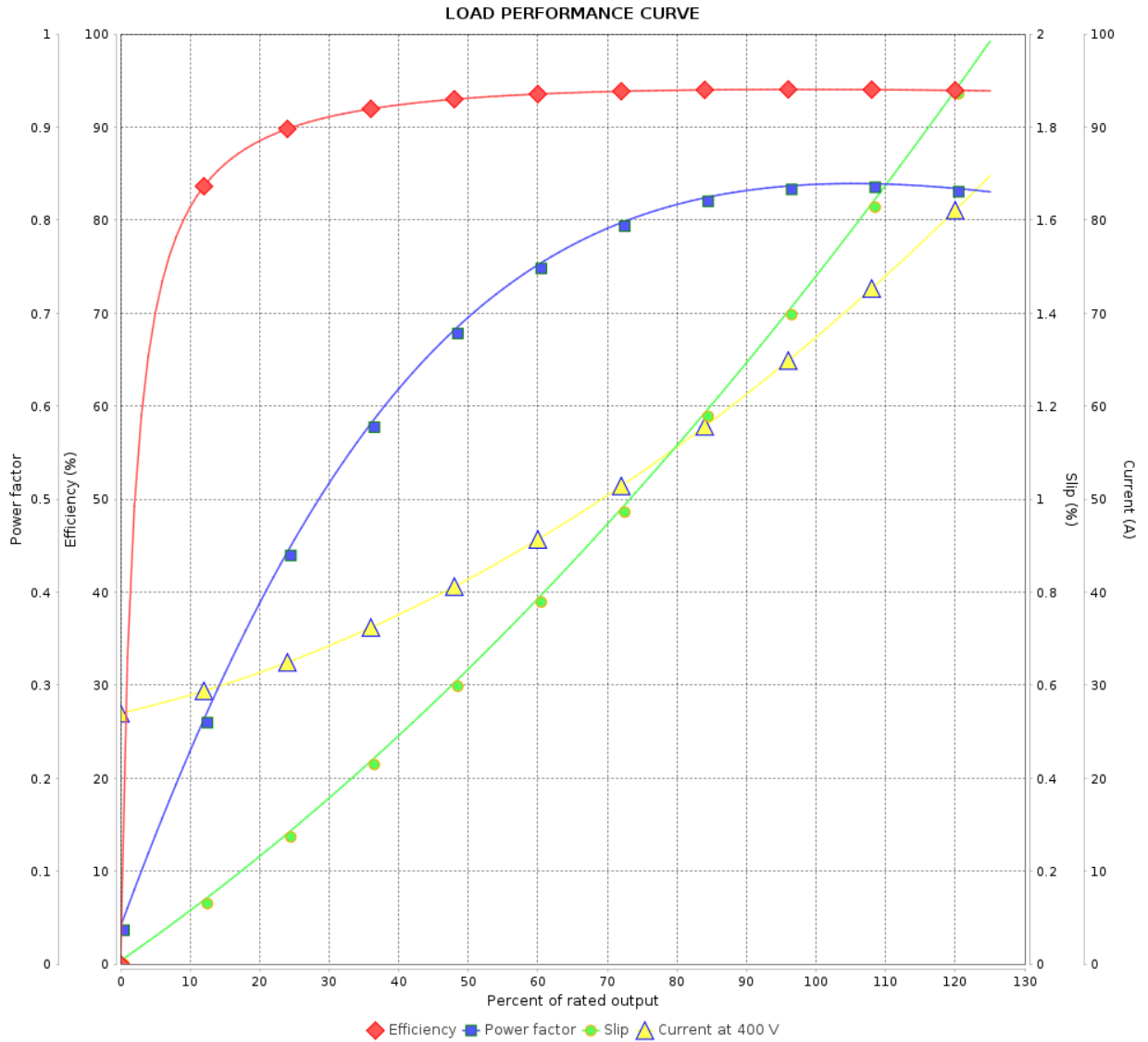
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase

Product code : 14180510



Performance : 400 V 50 Hz 6P IE3

Rated current : 67.6 A
 LRC : 7.2
 Rated torque : 36.8 kgfm
 Locked rotor torque : 260 %
 Breakdown torque : 280 %
 Rated speed : 985 rpm

Moment of inertia (J) : 1.55 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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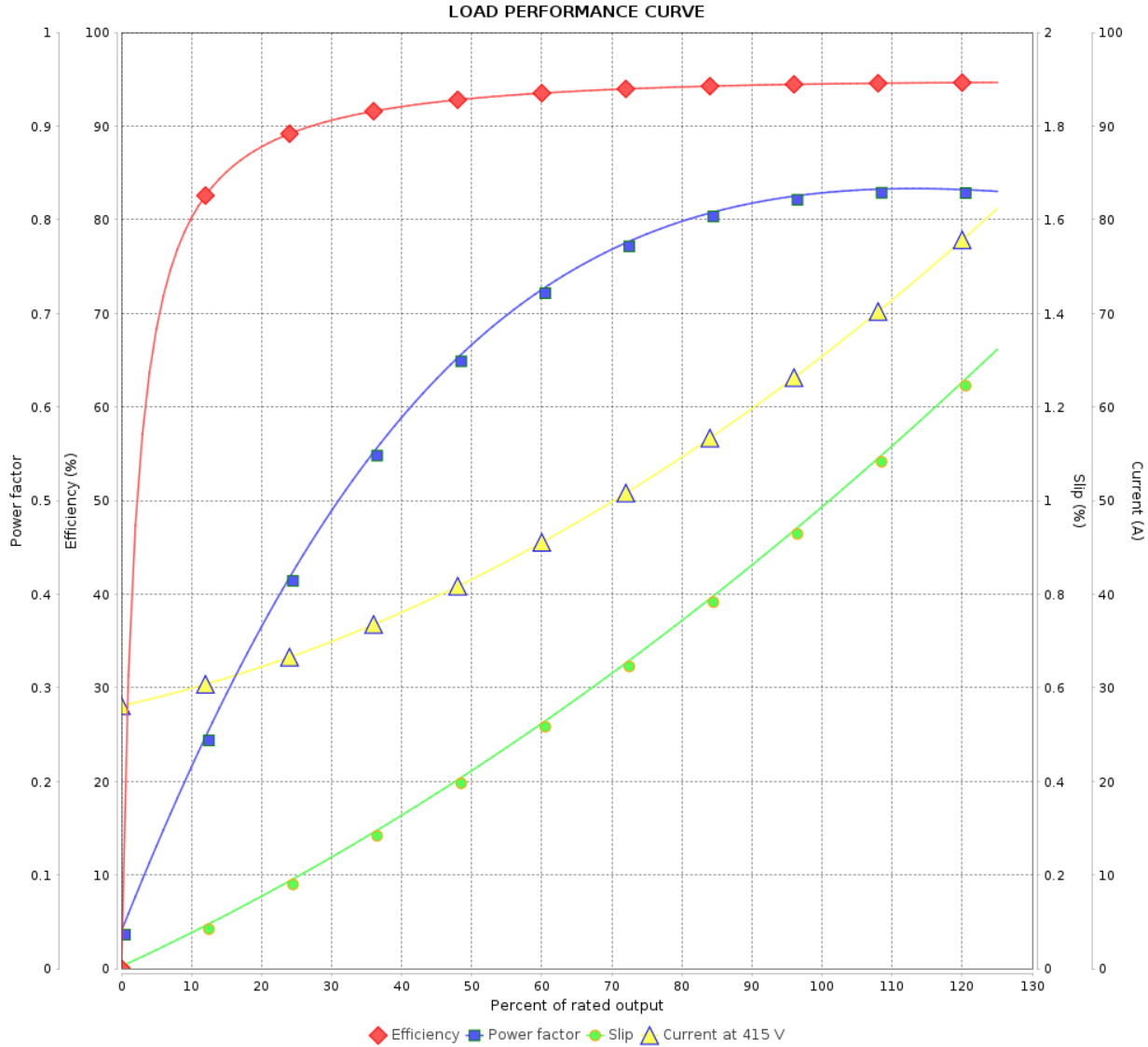
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14180510



Performance : 415 V 50 Hz 6P IE4

Rated current : 65.6 A
 LRC : 7.7
 Rated torque : 36.7 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 310 %
 Rated speed : 990 rpm

Moment of inertia (J) : 1.55 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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