

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 16681803
Frame	: 326T	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	: 293 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.5255 kgm ²	
Design	: B			
Output [HP]	30	30	30	30
Poles	6	6	6	6
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	73.4/36.7	43.7	42.2	40.9
L. R. Amperes [A]	521/261	249	266	274
LRC [A]	7.1x(Code H)	5.7x(Code F)	6.3x(Code G)	6.7x(Code H)
No load current [A]	34.0/17.0	17.3	18.6	19.7
Rated speed [RPM]	1180	975	975	980
Slip [%]	1.67	2.50	2.50	2.00
Rated torque [kgfm]	18.5	22.3	22.3	22.2
Locked rotor torque [%]	240	180	200	229
Breakdown torque [%]	270	210	229	250
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)
Noise level ²	62.0 dB(A)	58.0 dB(A)	58.0 dB(A)	58.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.4	91.7
	75%	93.0	92.4	92.4
	100%	93.0	91.0	92.4
Power Factor	25%			
	50%	0.63	0.70	0.63
	75%	0.75	0.80	0.75
	100%	0.81	0.84	0.81
Bearing type	: <u>Drive end</u> 6312 C3 <u>Non drive end</u> 6212 C3	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 553 kgf	
Lubrication interval	: 20000 h 20000 h	Max. compression	: 846 kgf	
Lubricant amount	: 21 g 13 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 81.2A SF 1.15 SFA 93.3A				
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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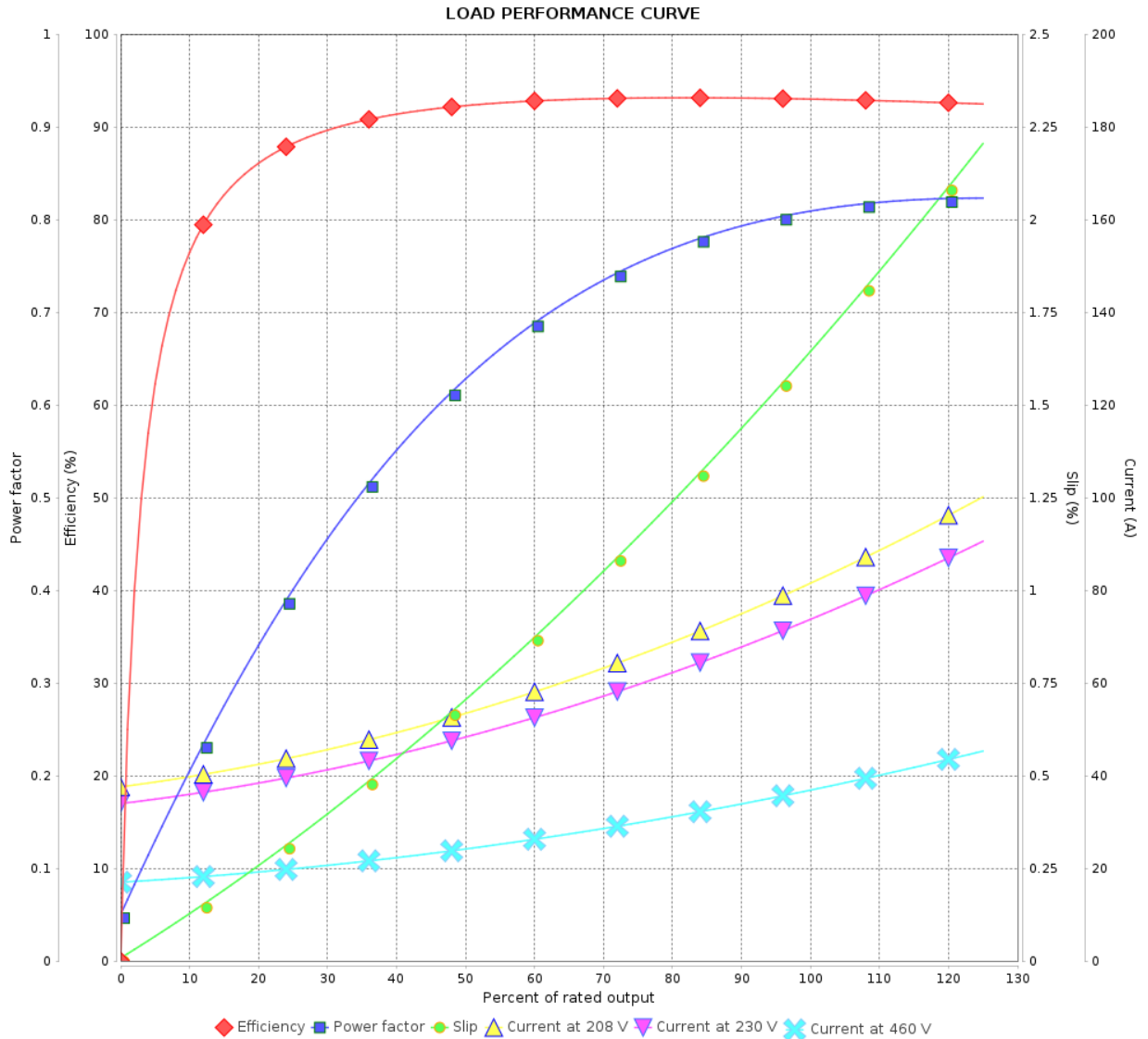
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16681803



Performance : 230/460 V 60 Hz 6P

Rated current : 73.4/36.7 A
 LRC : 7.1
 Rated torque : 18.5 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 270 %
 Rated speed : 1180 rpm

Moment of inertia (J) : 0.5255 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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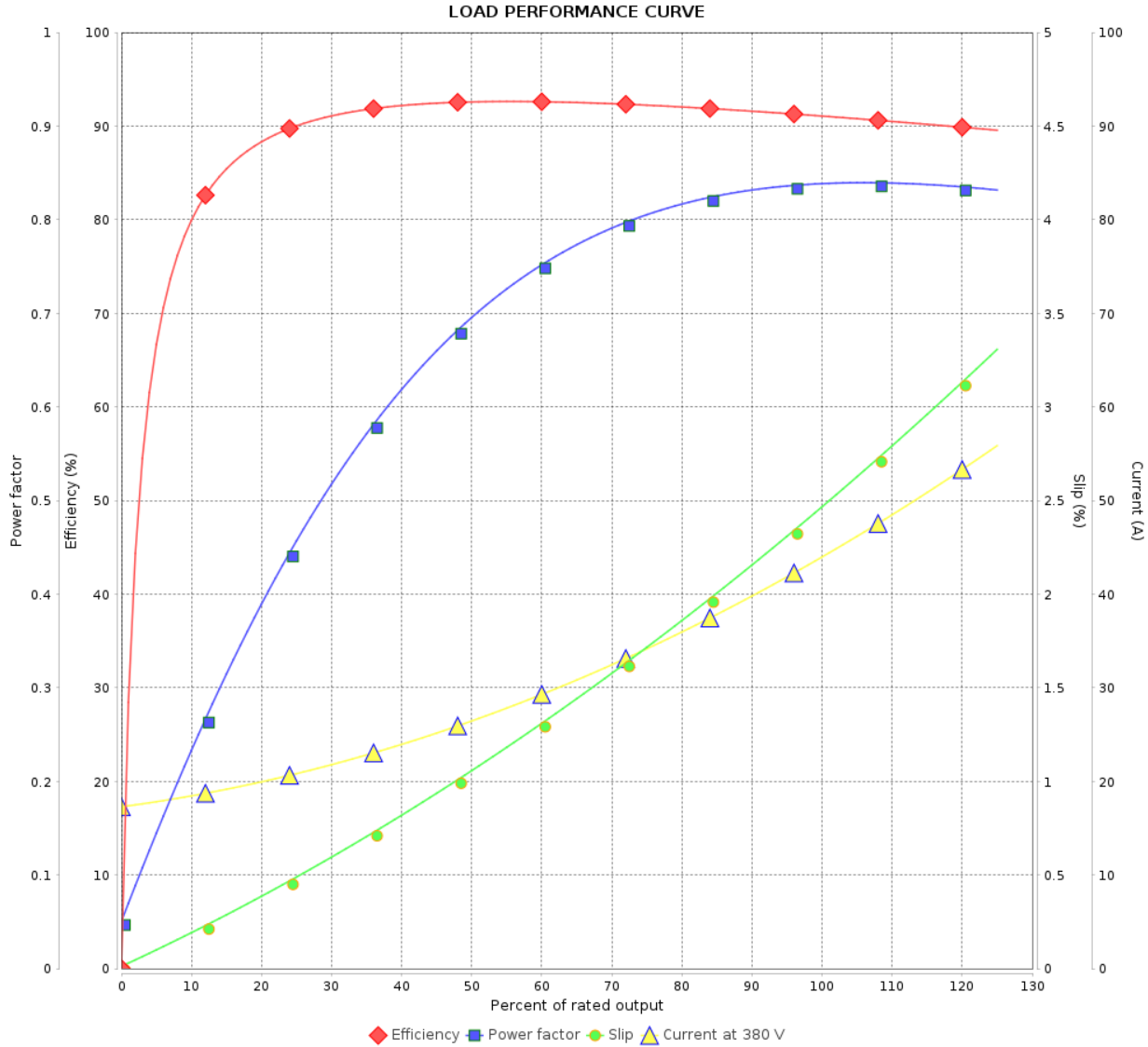
Three Phase Induction Motor - Squirrel Cage



Customer :

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

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Performance : 380 V 50 Hz 6P IE2

Rated current : 43.7 A
 LRC : 5.7
 Rated torque : 22.3 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 210 %
 Rated speed : 975 rpm

Moment of inertia (J) : 0.5255 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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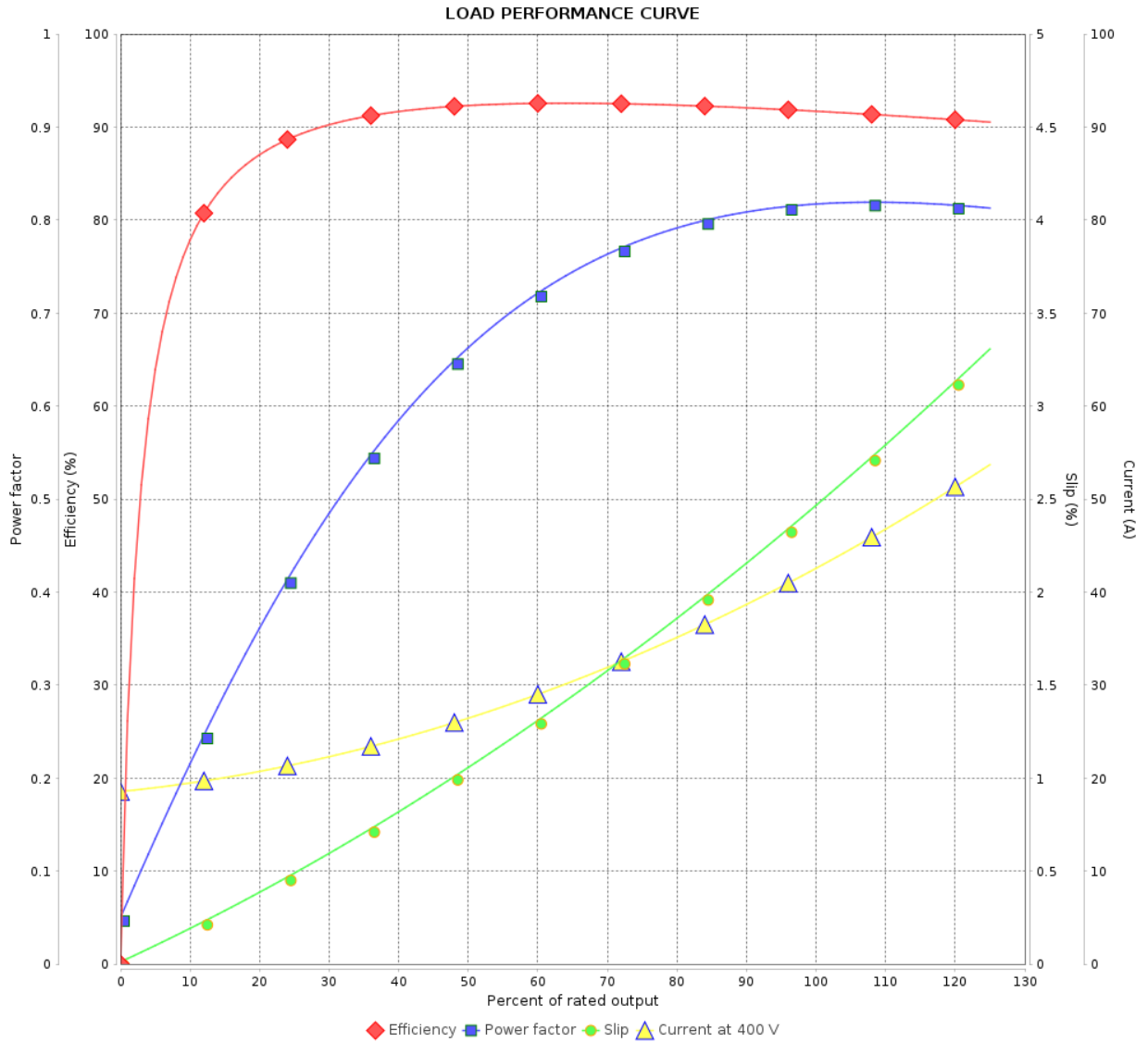
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 16681803



Performance : 400 V 50 Hz 6P IE2

Rated current : 42.2 A
LRC : 6.3
Rated torque : 22.3 kgfm
Locked rotor torque : 200 %
Breakdown torque : 229 %
Rated speed : 975 rpm

Moment of inertia (J) : 0.5255 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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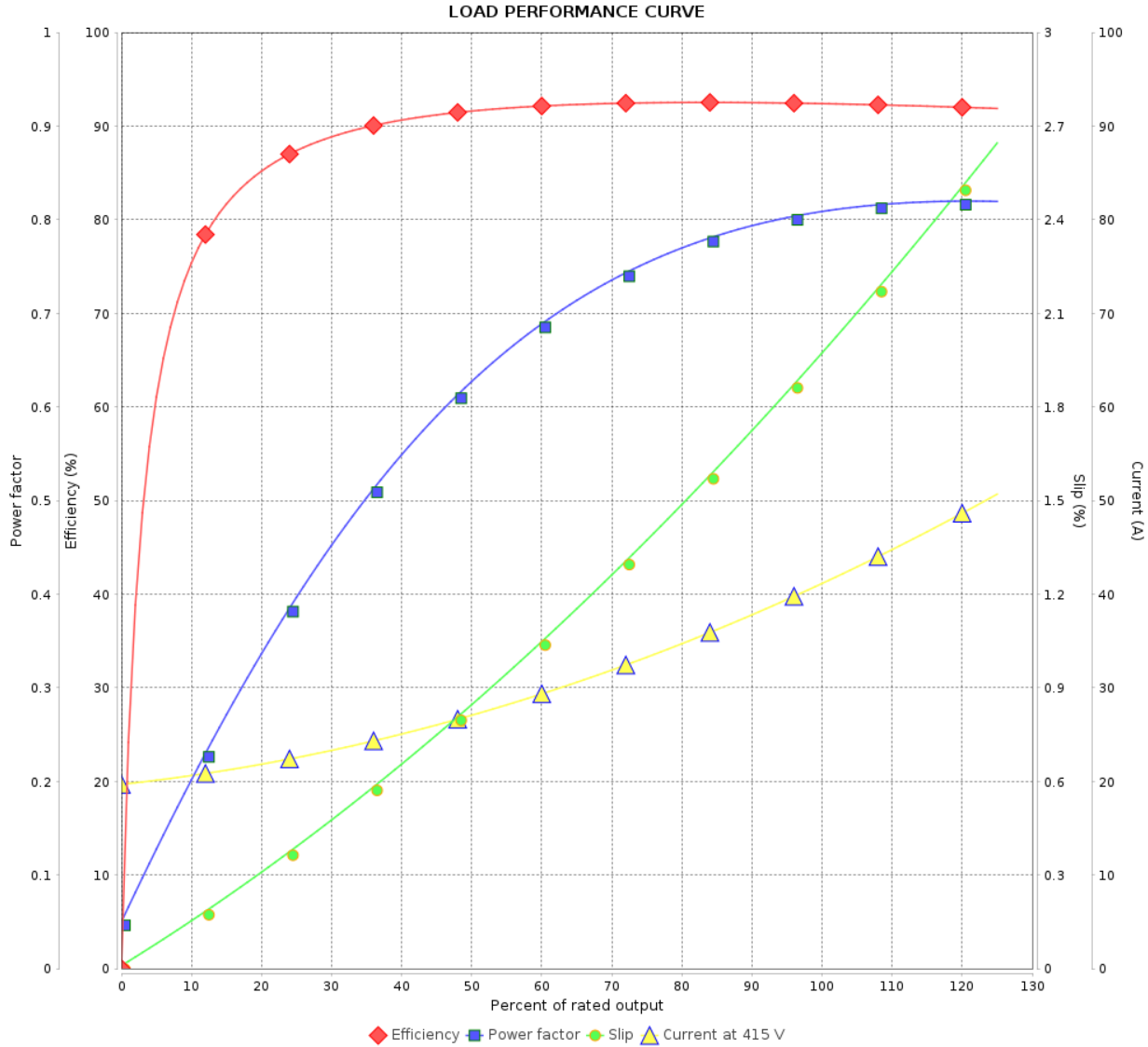
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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

Product code : 16681803



Performance : 415 V 50 Hz 6P IE3

Rated current : 40.9 A
 LRC : 6.7
 Rated torque : 22.2 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 250 %
 Rated speed : 980 rpm

Moment of inertia (J) : 0.5255 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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