

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 12310134
Frame	: 364/5TS	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	: 477 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.4198 kgm ²	
Design	: B			
Output [HP]	60	50	50	50
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	137/68.6	68.7	65.3	63.6
L. R. Amperes [A]	878/439	419	438	458
LRC [A]	6.4x(Code G)	6.1x(Code F)	6.7x(Code G)	7.2x(Code H)
No load current [A]	30.0/15.0	15.0	16.0	17.0
Rated speed [RPM]	3550	2950	2960	2960
Slip [%]	1.39	1.67	1.33	1.33
Rated torque [kgfm]	12.3	12.3	12.3	12.3
Locked rotor torque [%]	200	190	210	229
Breakdown torque [%]	250	240	260	290
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	108s (cold) 60s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)
Noise level ²	85.0 dB(A)	82.0 dB(A)	82.0 dB(A)	82.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.0	92.0
	75%	93.0	92.8	92.8
	100%	93.6	93.0	93.0
Power Factor	25%			
	50%	0.79	0.79	0.77
	75%	0.86	0.86	0.85
	100%	0.88	0.88	0.87
Bearing type	: <u>Drive end</u> 6314 C3 <u>Non drive end</u> 6314 C3	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 161 kgf	
Lubrication interval	: 3604 h 3604 h	Max. compression	: 638 kgf	
Lubricant amount	: 27 g 27 g			
Lubricant type	: Mobil Polyrex EM			
Notes				
USABLE @208V 151A SF 1.00 SFA 151A				
This revision replaces and cancel the previous one, which must be eliminated.		These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
(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.				
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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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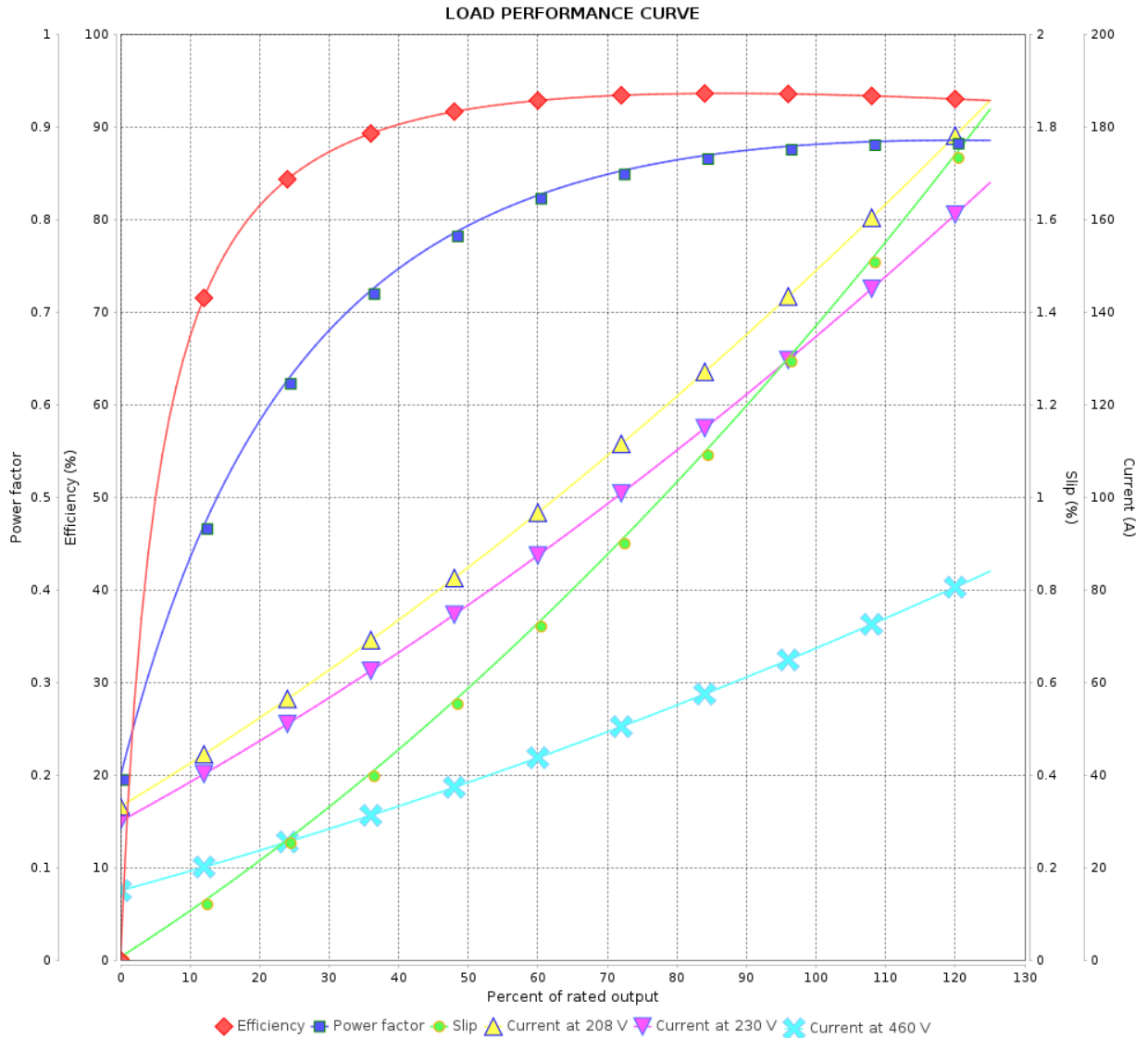
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12310134



Performance : 230/460 V 60 Hz 2P

Rated current : 137/68.6 A
 LRC : 6.4
 Rated torque : 12.3 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 250 %
 Rated speed : 3550 rpm

Moment of inertia (J) : 0.4198 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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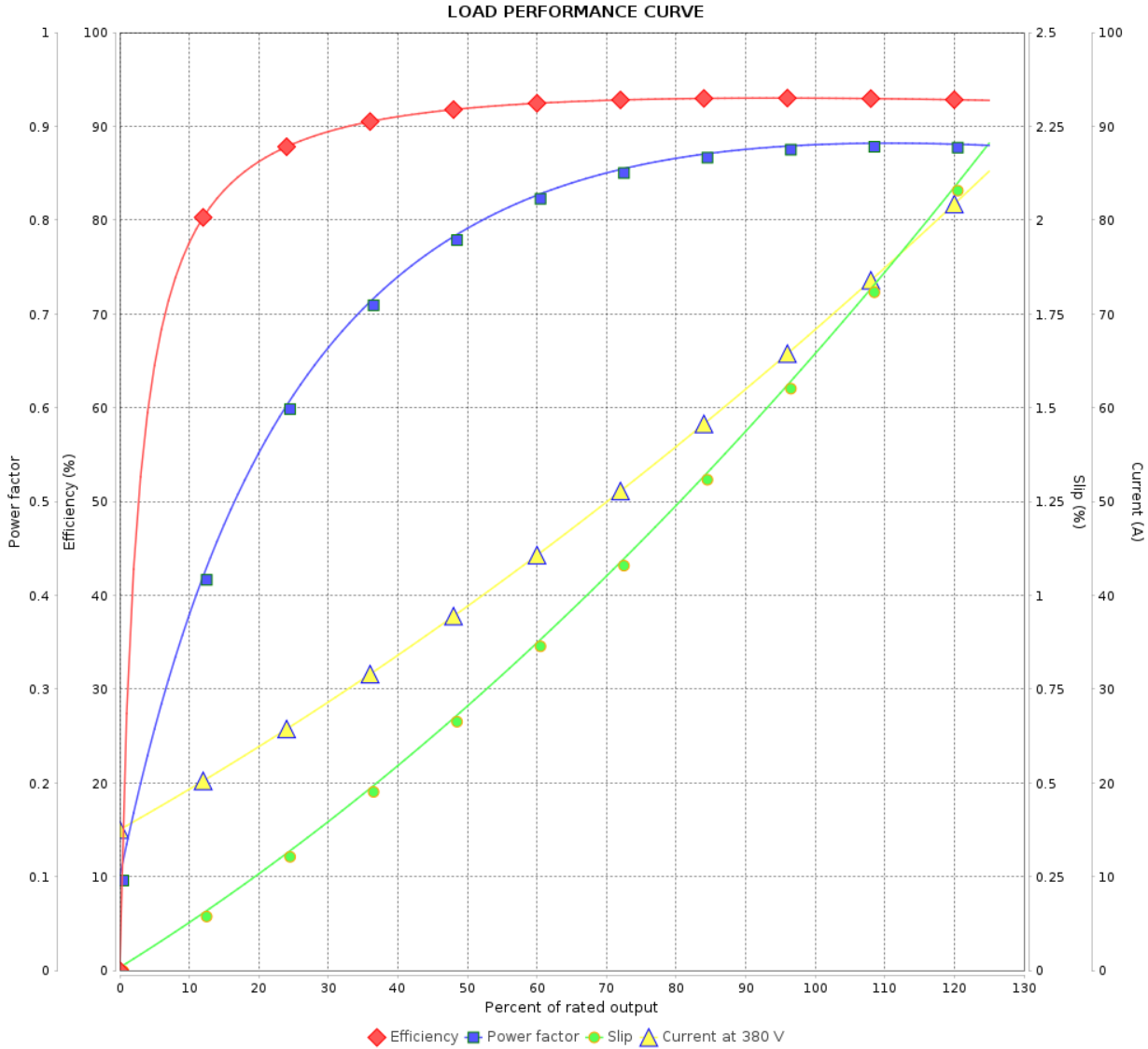
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12310134



Performance : 380 V 50 Hz 2P IE2

Rated current : 68.7 A
 LRC : 6.1
 Rated torque : 12.3 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 240 %
 Rated speed : 2950 rpm

Moment of inertia (J) : 0.4198 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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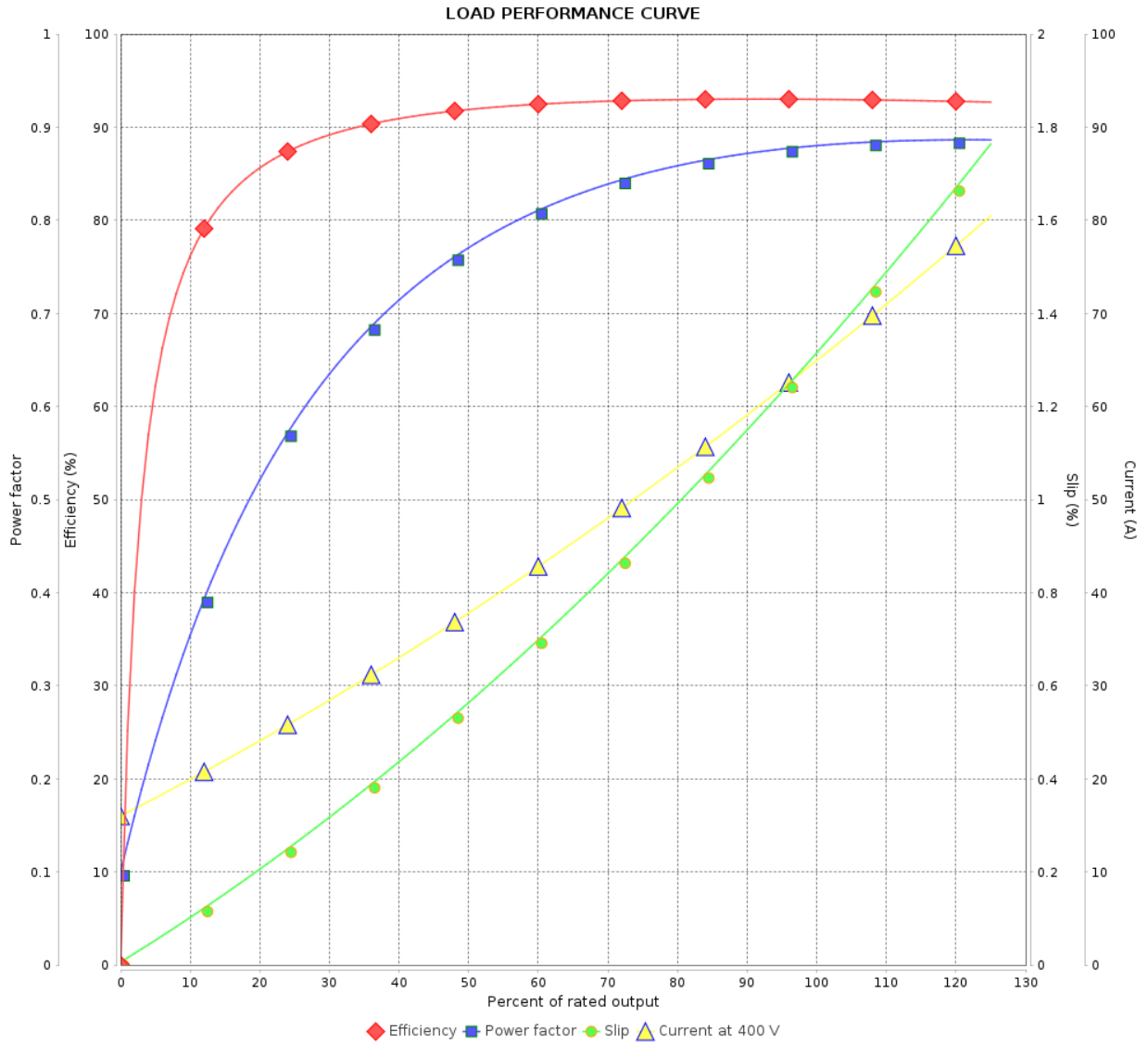
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 12310134



Performance : 400 V 50 Hz 2P IE2

Rated current : 65.3 A
 LRC : 6.7
 Rated torque : 12.3 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 260 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.4198 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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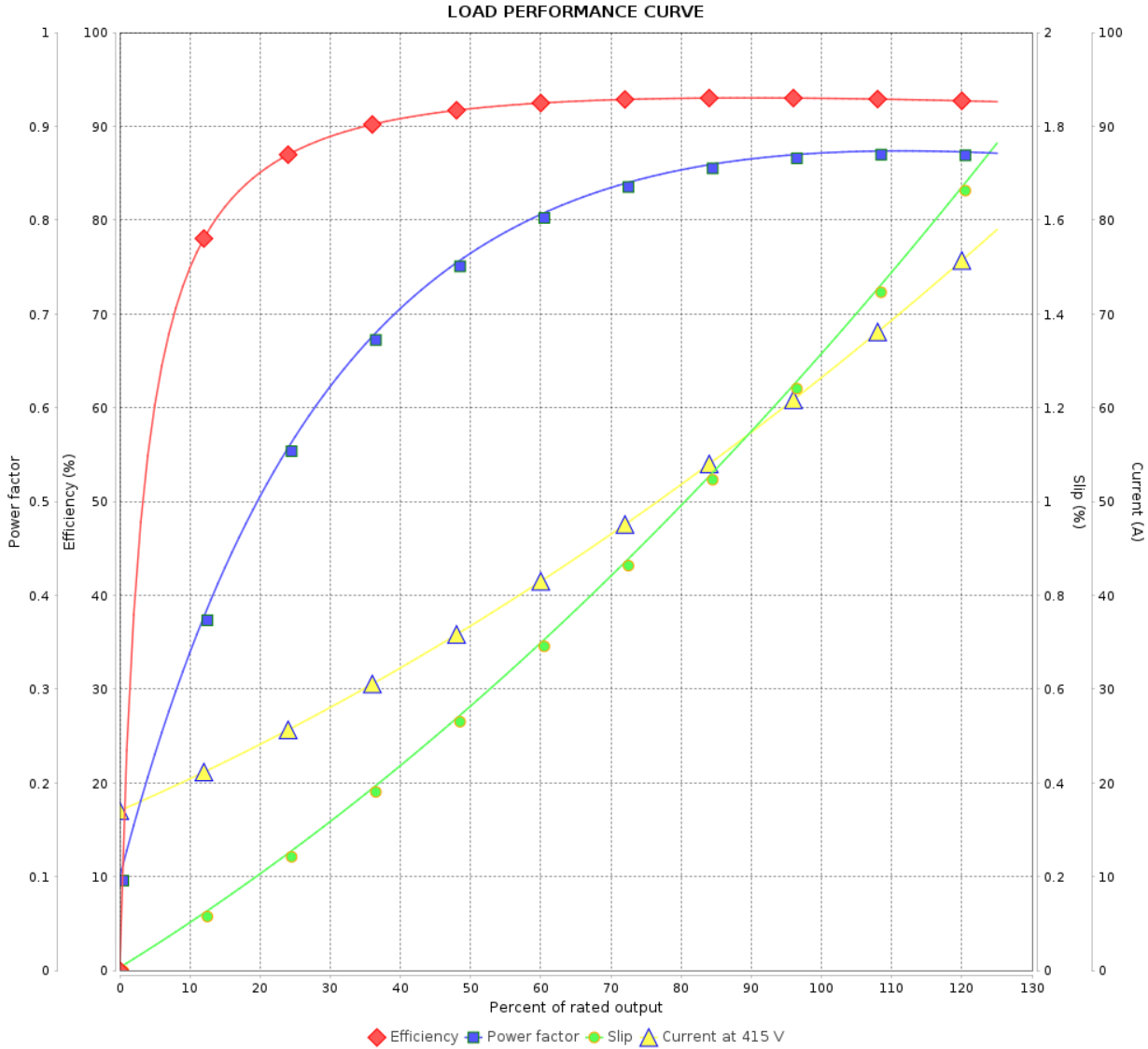
Three Phase Induction Motor - Squirrel Cage



Customer :

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Product code : 12310134



Performance : 415 V 50 Hz 2P IE2

Rated current : 63.6 A
 LRC : 7.2
 Rated torque : 12.3 kgfm
 Locked rotor torque : 229 %
 Breakdown torque : 290 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.4198 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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