

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14408026
Frame	: 254TC	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	: 147 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.0500 kgm ²	
Design	: B			
Output [HP]	15	15	15	15
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	34.8/17.4	21.0	20.0	19.5
L. R. Amperes [A]	237/118	113	124	131
LRC [A]	6.8x(Code G)	5.4x(Code E)	6.2x(Code G)	6.7x(Code G)
No load current [A]	12.0/6.00	5.90	6.30	6.60
Rated speed [RPM]	3540	2915	2925	2930
Slip [%]	1.67	2.83	2.50	2.33
Rated torque [kgfm]	3.08	3.73	3.72	3.72
Locked rotor torque [%]	200	150	170	190
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	55s (cold) 31s (hot)	55s (cold) 31s (hot)	55s (cold) 31s (hot)	55s (cold) 31s (hot)
Noise level ²	75.0 dB(A)	70.0 dB(A)	70.0 dB(A)	70.0 dB(A)
Efficiency (%)	25%			
	50%	90.0	91.0	91.0
	75%	90.5	90.2	91.0
	100%	91.0	89.5	90.2
Power Factor	25%			
	50%	0.74	0.80	0.76
	75%	0.83	0.86	0.85
	100%	0.87	0.89	0.88
Bearing type	: <u>Drive end</u> 6309 C3 <u>Non drive end</u> 6209 C3	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction	: 72 kgf	
Lubrication interval	: 15797 h 18447 h	Max. compression	: 219 kgf	
Lubricant amount	: 13 g 9 g			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 37.3A SF 1.15 SFA 42.9A				
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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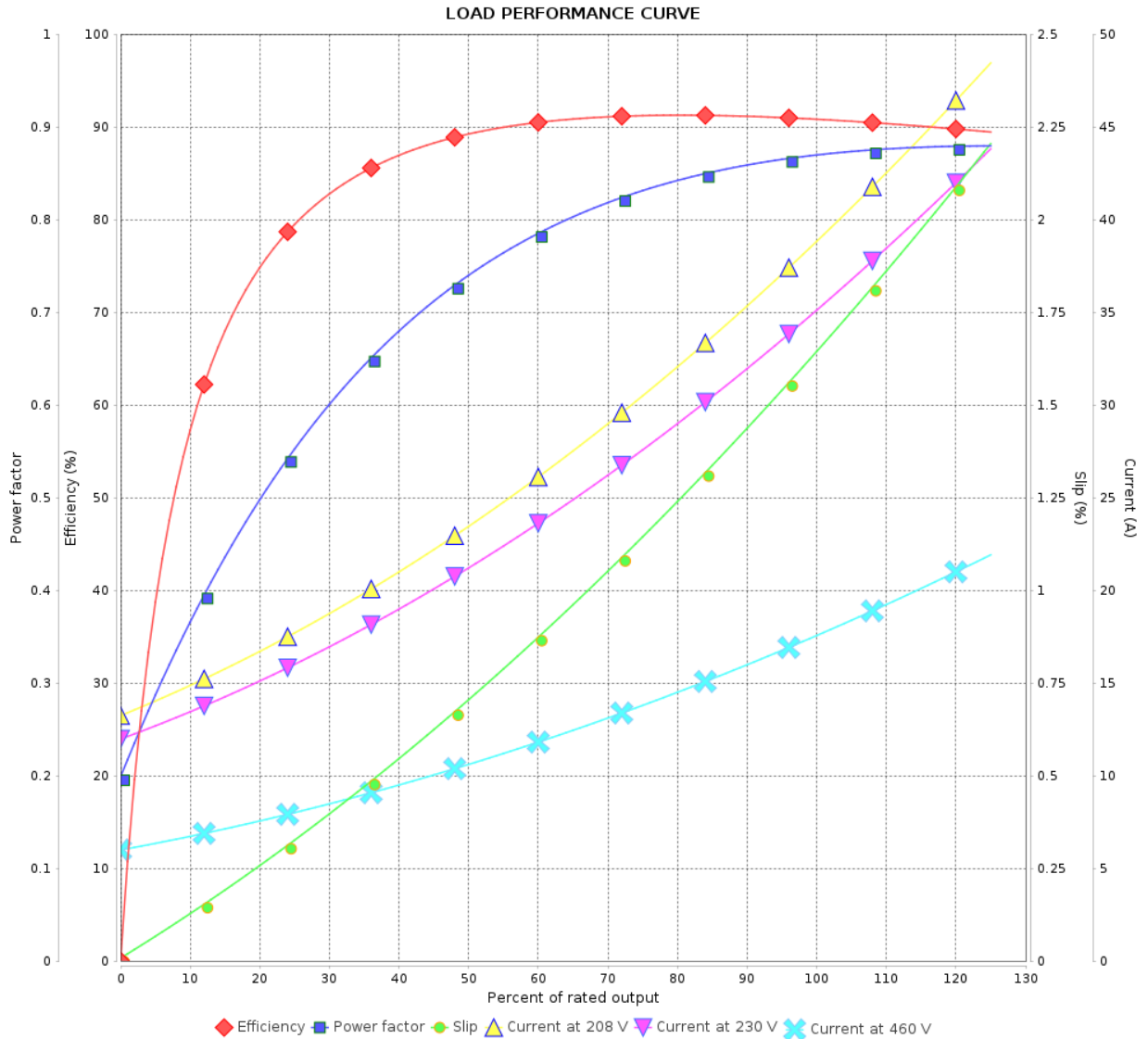
Three Phase Induction Motor - Squirrel Cage



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

Product code : 14408026



Performance : 230/460 V 60 Hz 2P

Rated current : 34.8/17.4 A
 LRC : 6.8
 Rated torque : 3.08 kgfm
 Locked rotor torque : 200 %
 Breakdown torque : 270 %
 Rated speed : 3540 rpm

Moment of inertia (J) : 0.0500 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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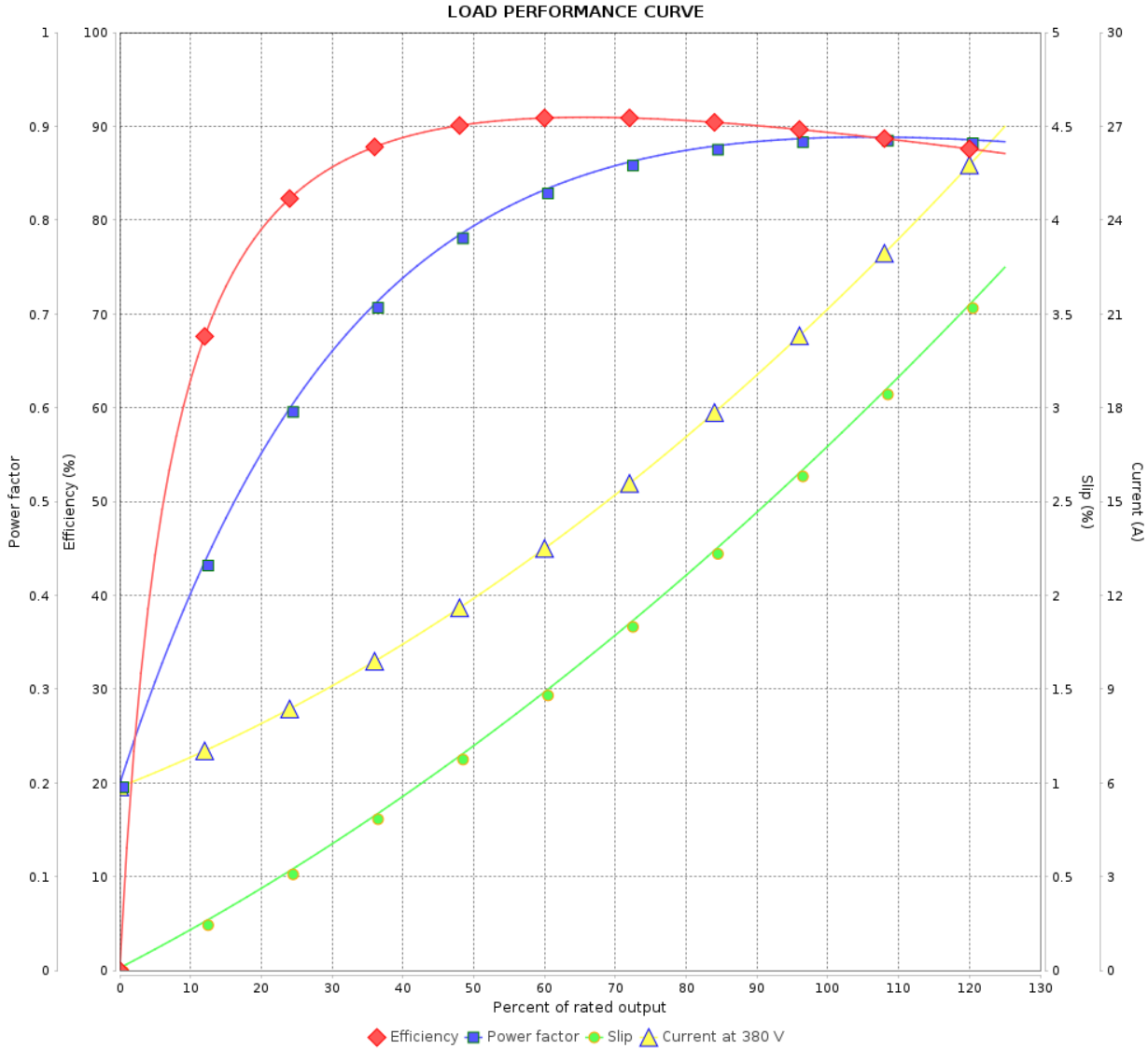
Three Phase Induction Motor - Squirrel Cage



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Performance : 380 V 50 Hz 2P IE2

Rated current : 21.0 A
LRC : 5.4
Rated torque : 3.73 kgfm
Locked rotor torque : 150 %
Breakdown torque : 210 %
Rated speed : 2915 rpm

Moment of inertia (J) : 0.0500 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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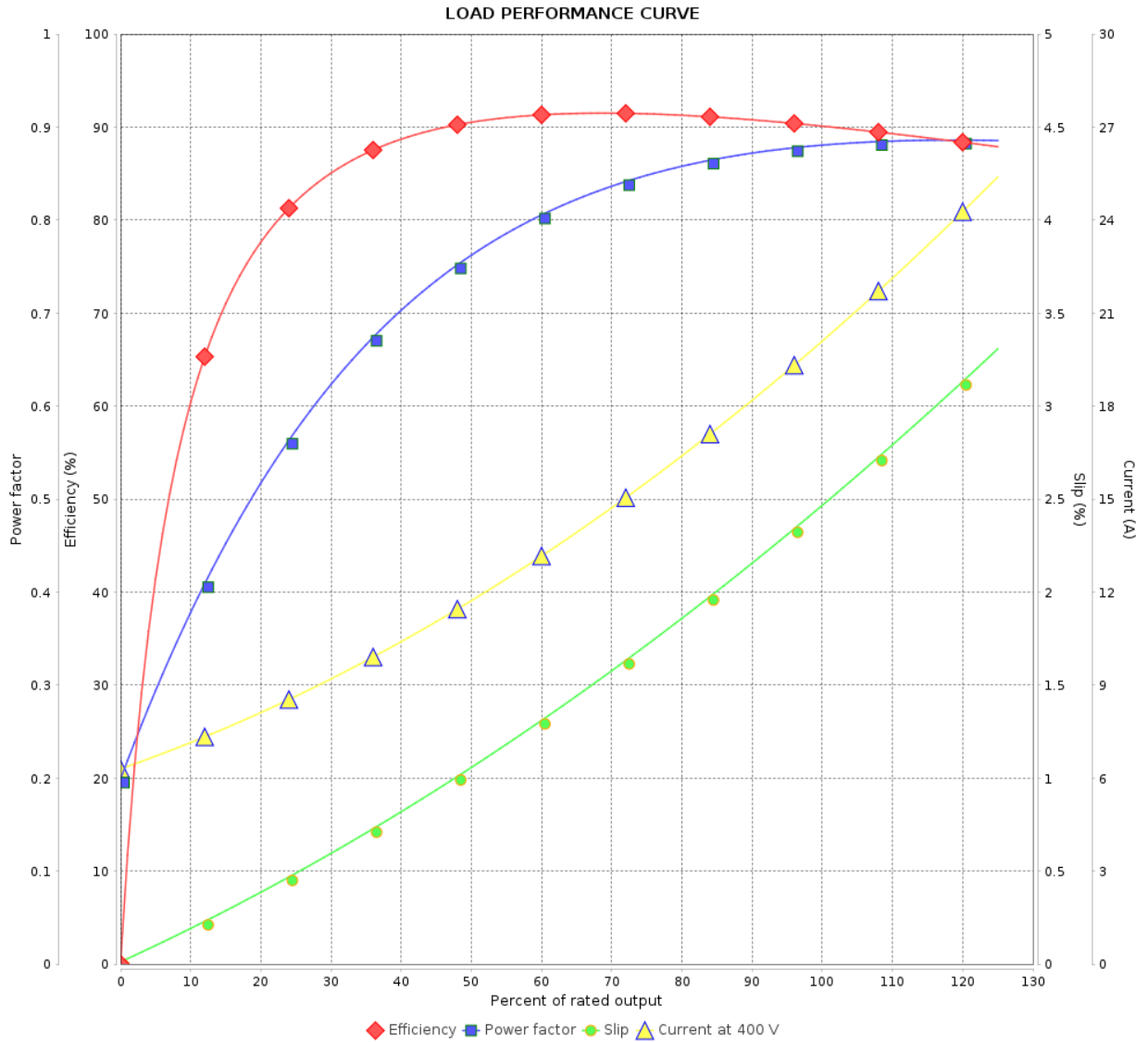
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 2P IE2

Rated current : 20.0 A
 LRC : 6.2
 Rated torque : 3.72 kgfm
 Locked rotor torque : 170 %
 Breakdown torque : 229 %
 Rated speed : 2925 rpm

Moment of inertia (J) : 0.0500 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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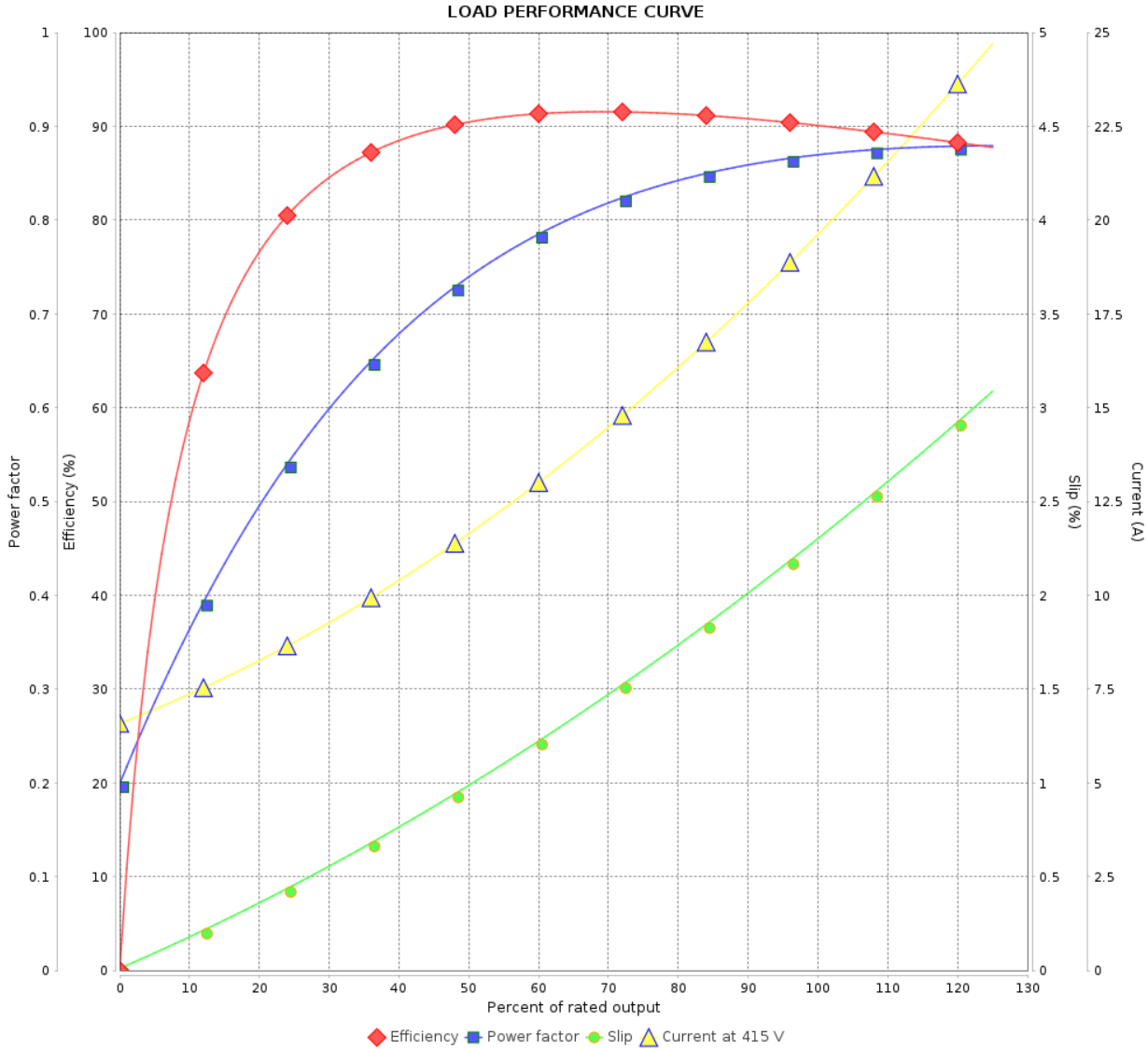
Three Phase Induction Motor - Squirrel Cage



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Product code : 14408026



Performance : 415 V 50 Hz 2P IE2

Rated current : 19.5 A
 LRC : 6.7
 Rated torque : 3.72 kgfm
 Locked rotor torque : 190 %
 Breakdown torque : 250 %
 Rated speed : 2930 rpm

Moment of inertia (J) : 0.0500 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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