

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 15488756
Frame	: 254T	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	: 146 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.1436 kgm ²	
Design	: B			
Output [HP]	5	5	5	5
Poles	8	8	8	8
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	15.9/7.93	9.17	8.92	8.73
L. R. Amperes [A]	84.0/42.0	48.6	47.3	46.3
LRC [A]	5.3x(Code H)	5.3x(Code H)	5.3x(Code H)	5.3x(Code H)
No load current [A]	11.0/5.50	5.44	5.77	6.03
Rated speed [RPM]	880	720	725	730
Slip [%]	2.22	4.00	3.33	2.67
Rated torque [kgfm]	4.12	5.04	5.01	4.97
Locked rotor torque [%]	210	160	180	200
Breakdown torque [%]	270	200	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	37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)	37s (cold) 21s (hot)
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)
Efficiency (%)	25%			
	50%	84.0	82.5	82.5
	75%	86.5	84.0	84.0
	100%	87.5	84.0	85.5
Power Factor	25%			
	50%	0.46	0.53	0.50
	75%	0.58	0.65	0.62
	100%	0.67	0.73	0.70
Bearing type	: <u>Drive end</u> 6309 2RS C3	<u>Non drive end</u> 6209 2RS C3	Foundation loads	
Sealing	: Oil Seal	Lip Seal	Max. traction	: 122 kgf
Lubrication interval	: -	-	Max. compression	: 268 kgf
Lubricant amount	: -	-		
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 17.5A SF 1.15 SFA 20.2A				
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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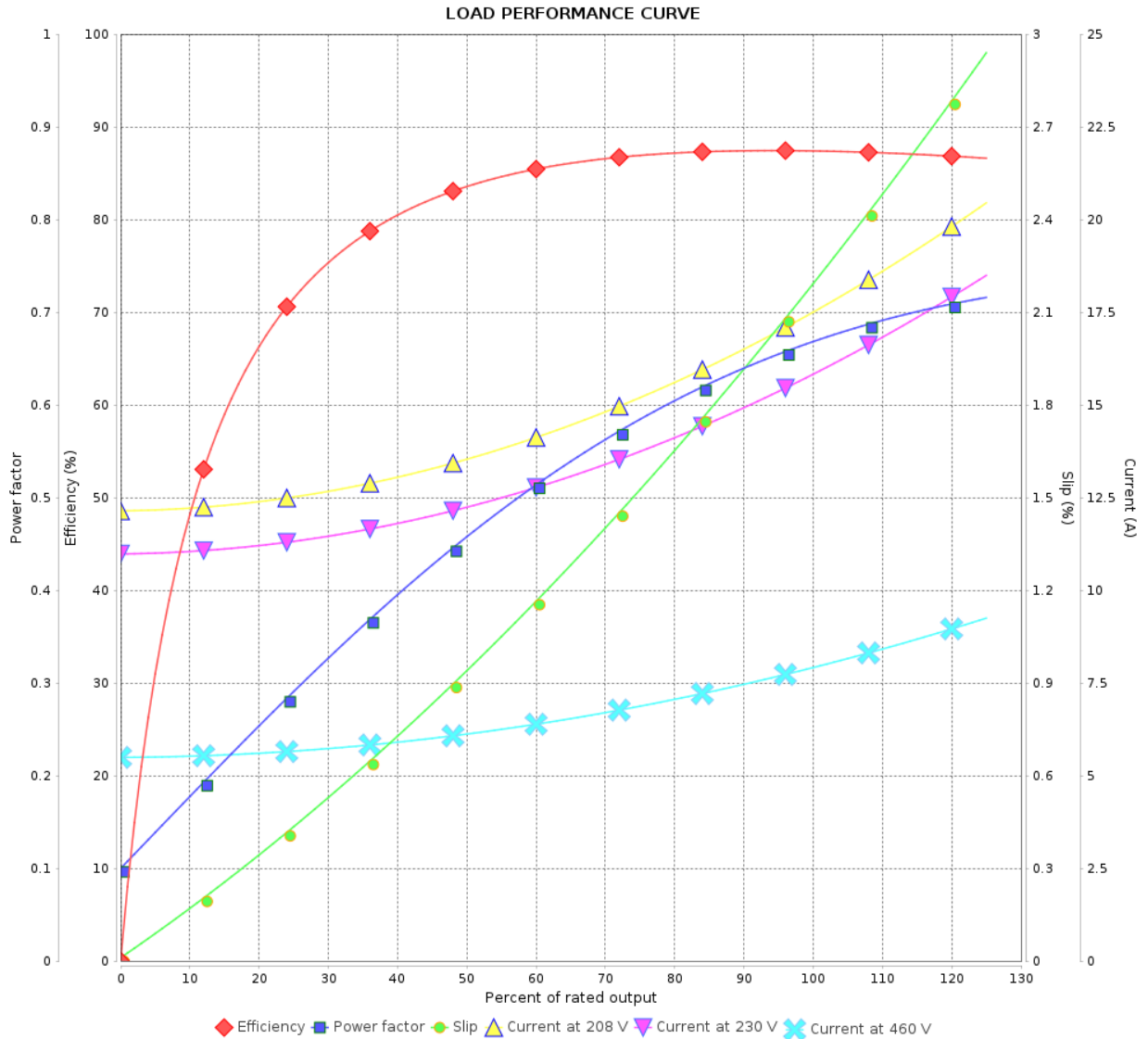
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Performance : 230/460 V 60 Hz 8P

Rated current : 15.9/7.93 A
 LRC : 5.3
 Rated torque : 4.12 kgfm
 Locked rotor torque : 210 %
 Breakdown torque : 270 %
 Rated speed : 880 rpm

Moment of inertia (J) : 0.1436 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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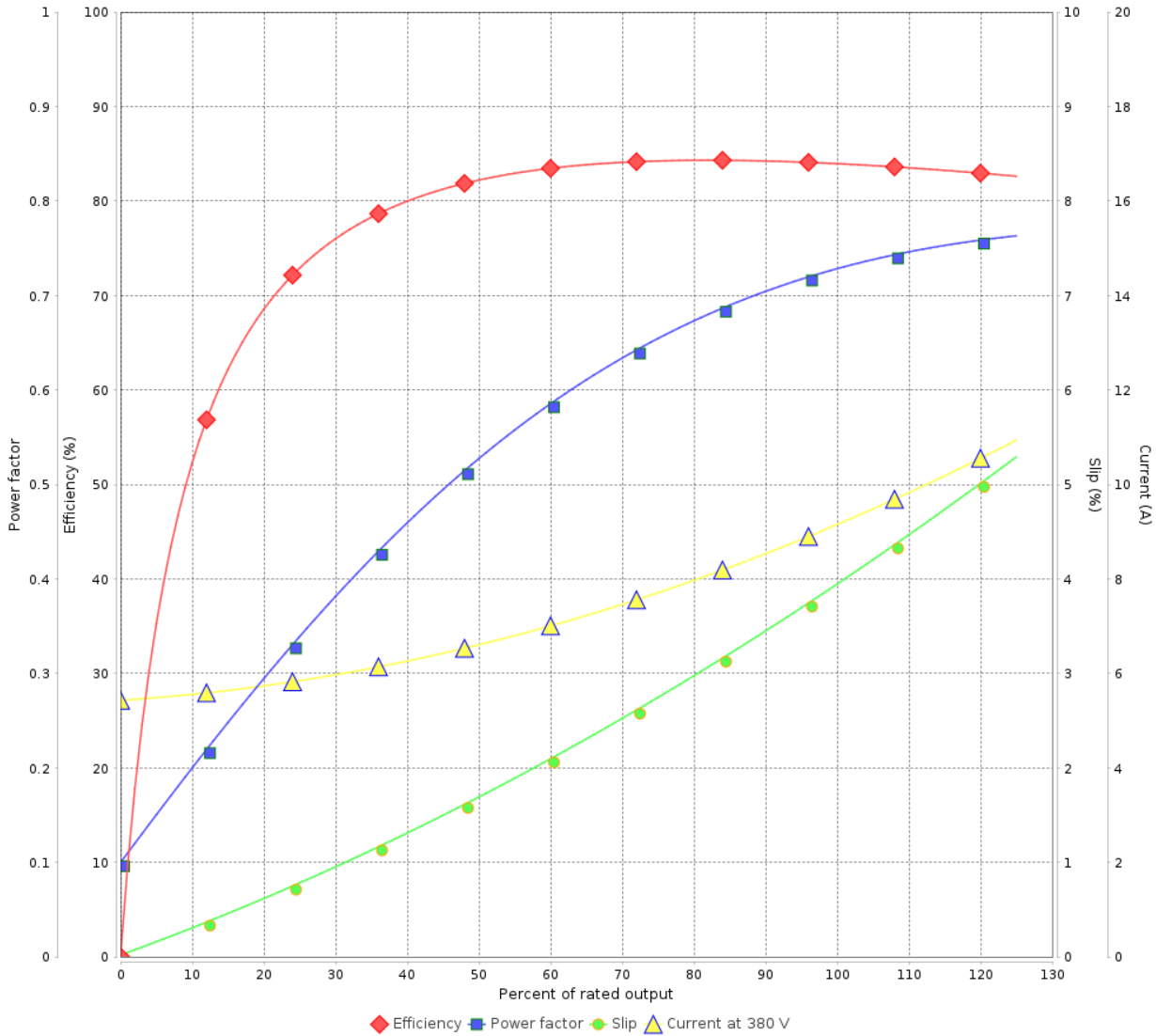


Customer :

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Performance : 380 V 50 Hz 8P IE2

Rated current : 9.17 A
LRC : 5.3
Rated torque : 5.04 kgfm
Locked rotor torque : 160 %
Breakdown torque : 200 %
Rated speed : 720 rpm

Moment of inertia (J) : 0.1436 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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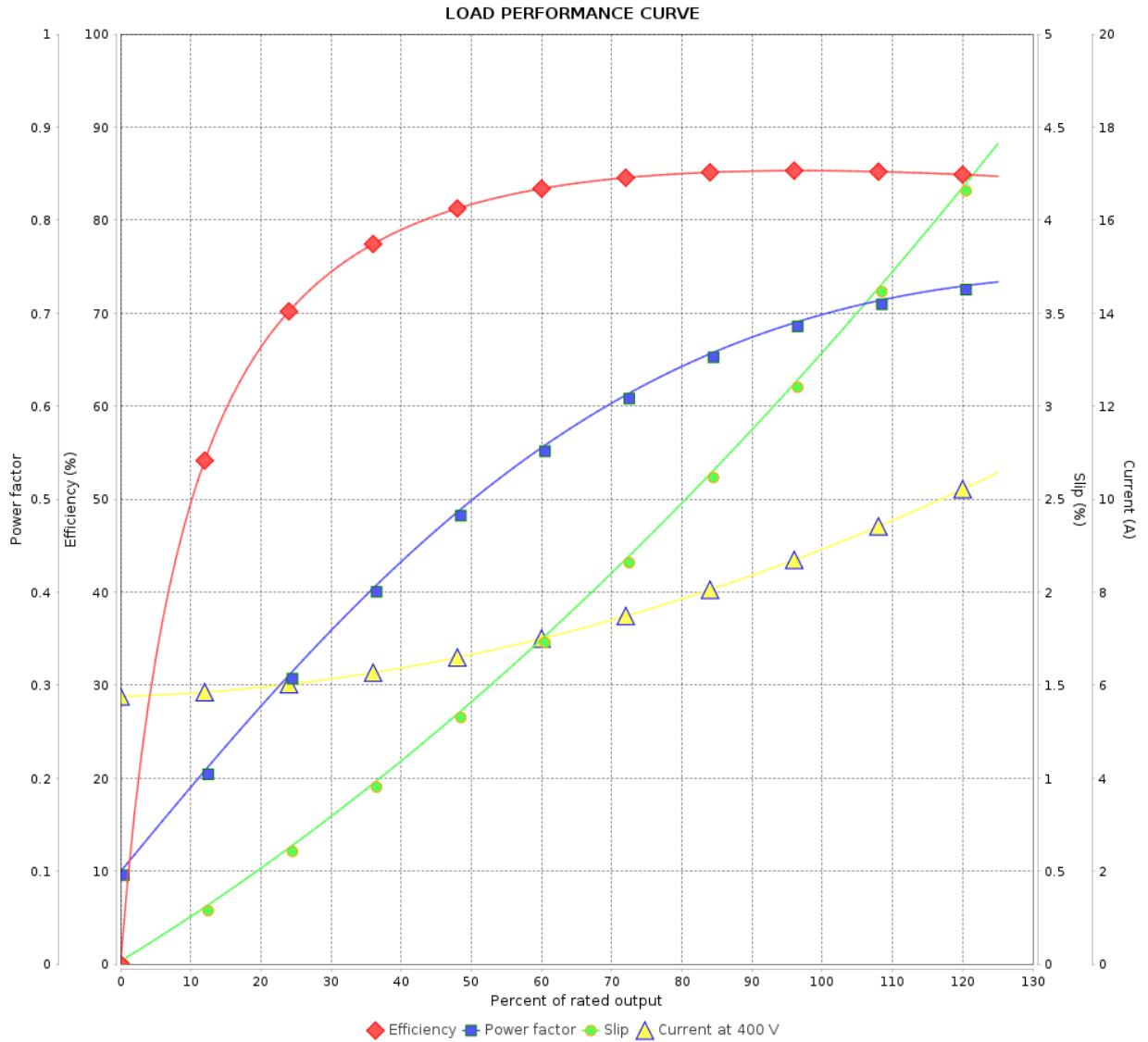
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Performance : 400 V 50 Hz 8P IE3

Rated current : 8.92 A
LRC : 5.3
Rated torque : 5.01 kgfm
Locked rotor torque : 180 %
Breakdown torque : 229 %
Rated speed : 725 rpm

Moment of inertia (J) : 0.1436 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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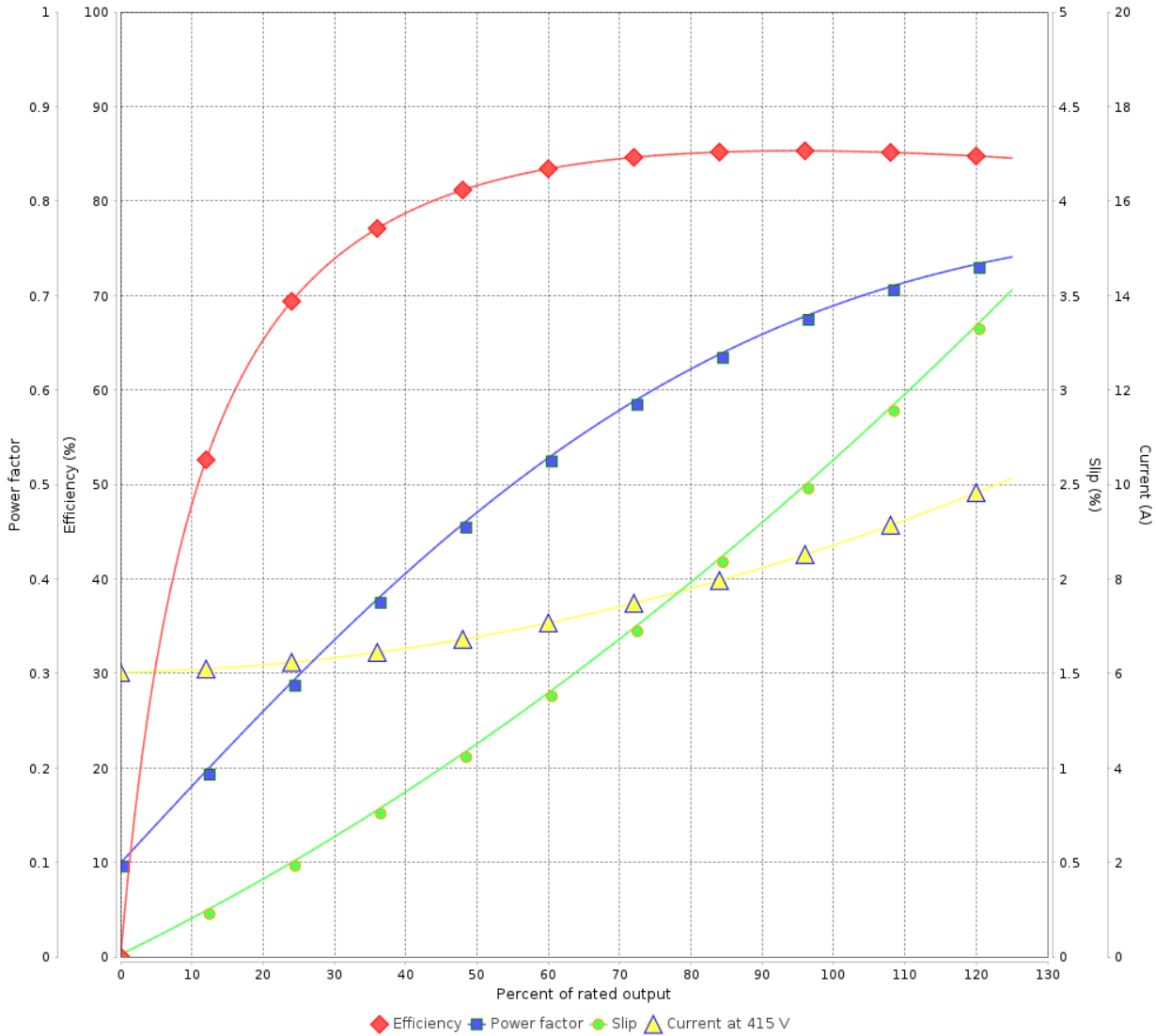


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Performance : 415 V 50 Hz 8P IE3

Rated current : 8.73 A
LRC : 5.3
Rated torque : 4.97 kgfm
Locked rotor torque : 200 %
Breakdown torque : 250 %
Rated speed : 730 rpm

Moment of inertia (J) : 0.1436 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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