

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 16176156	
Frame	: 326TSC	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	: 308 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.2284 kgm ²		
Design	: B				
Output [HP]	50	40	40	40	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	111/55.5	55.1	52.6	51.0	
L. R. Amperes [A]	799/400	369	389	403	
LRC [A]	7.2x(Code H)	6.7x(Code G)	7.4x(Code H)	7.9x(Code J)	
No load current [A]	29.5/14.8	14.5	15.7	16.6	
Rated speed [RPM]	3560	2960	2965	2965	
Slip [%]	1.11	1.33	1.17	1.17	
Rated torque [kgfm]	10.2	9.81	9.79	9.79	
Locked rotor torque [%]	260	240	270	280	
Breakdown torque [%]	260	250	280	300	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	59s (cold) 33s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	36s (cold) 20s (hot)	
Noise level ²	81.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	
Efficiency (%)	25%				
	50%	92.4	92.4	92.4	
	75%	93.6	93.0	93.6	
	100%	94.1	93.0	93.6	
Power Factor	25%				
	50%	0.82	0.82	0.79	
	75%	0.88	0.88	0.86	
	100%	0.89	0.89	0.88	
	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads		
Bearing type	: 6312 C3	6212 C3	Max. traction	: 216 kgf	
Sealing	: Oil Seal	Lip Seal	Max. compression	: 523 kgf	
Lubrication interval	: 9829 h	12143 h			
Lubricant amount	: 21 g	13 g			
Lubricant type	: Mobil Polyrex EM				
Notes USABLE @208V 123A SF 1.00 SFA 123A					
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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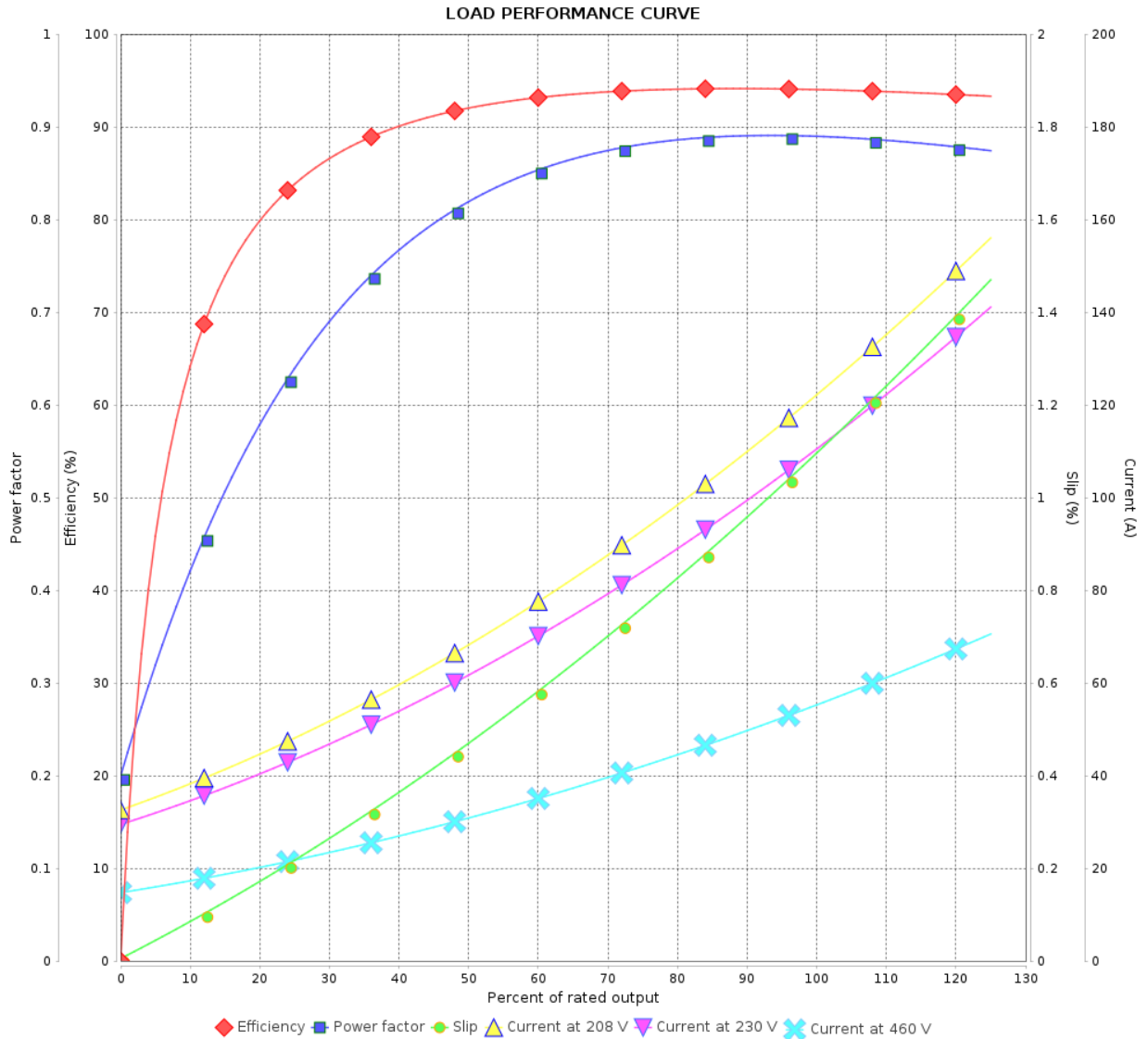
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Performance : 230/460 V 60 Hz 2P

Rated current : 111/55.5 A
LRC : 7.2
Rated torque : 10.2 kgfm
Locked rotor torque : 260 %
Breakdown torque : 260 %
Rated speed : 3560 rpm

Moment of inertia (J) : 0.2284 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.15
Temperature rise : 80 K
Design : B

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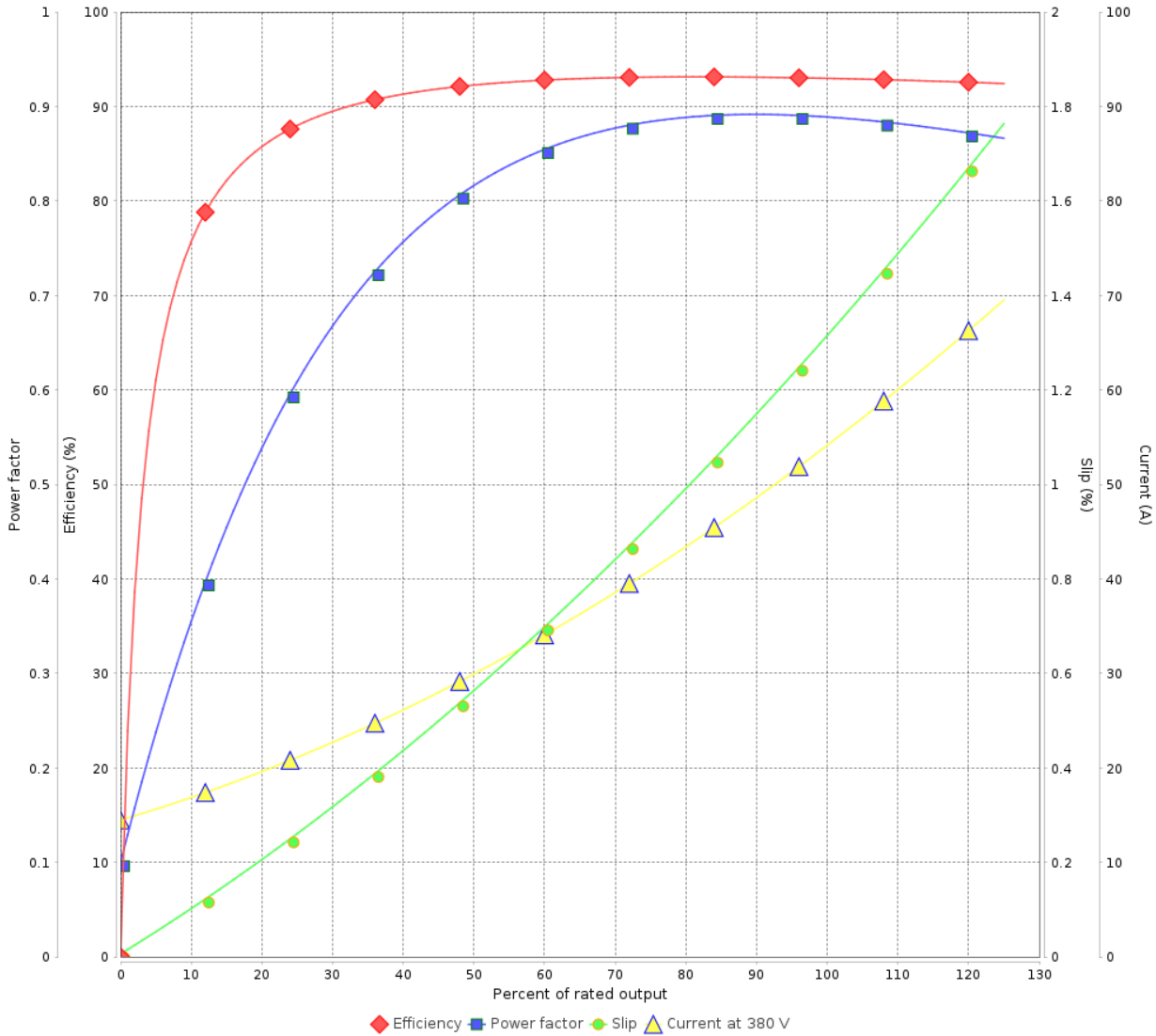


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Performance : 380 V 50 Hz 2P IE2

Rated current : 55.1 A
LRC : 6.7
Rated torque : 9.81 kgfm
Locked rotor torque : 240 %
Breakdown torque : 250 %
Rated speed : 2960 rpm

Moment of inertia (J) : 0.2284 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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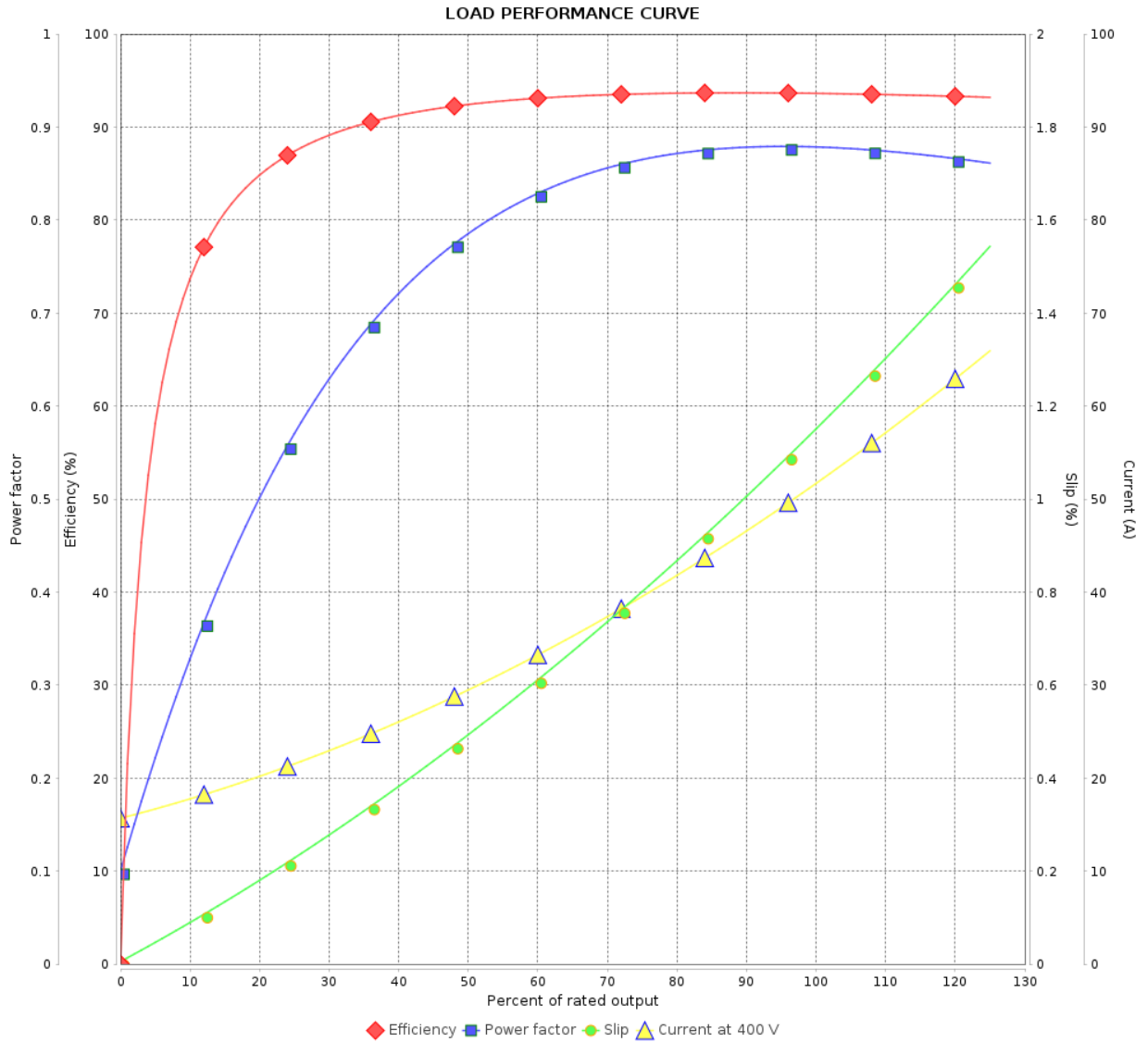
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Performance : 400 V 50 Hz 2P IE3

Rated current : 52.6 A
 LRC : 7.4
 Rated torque : 9.79 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 280 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.2284 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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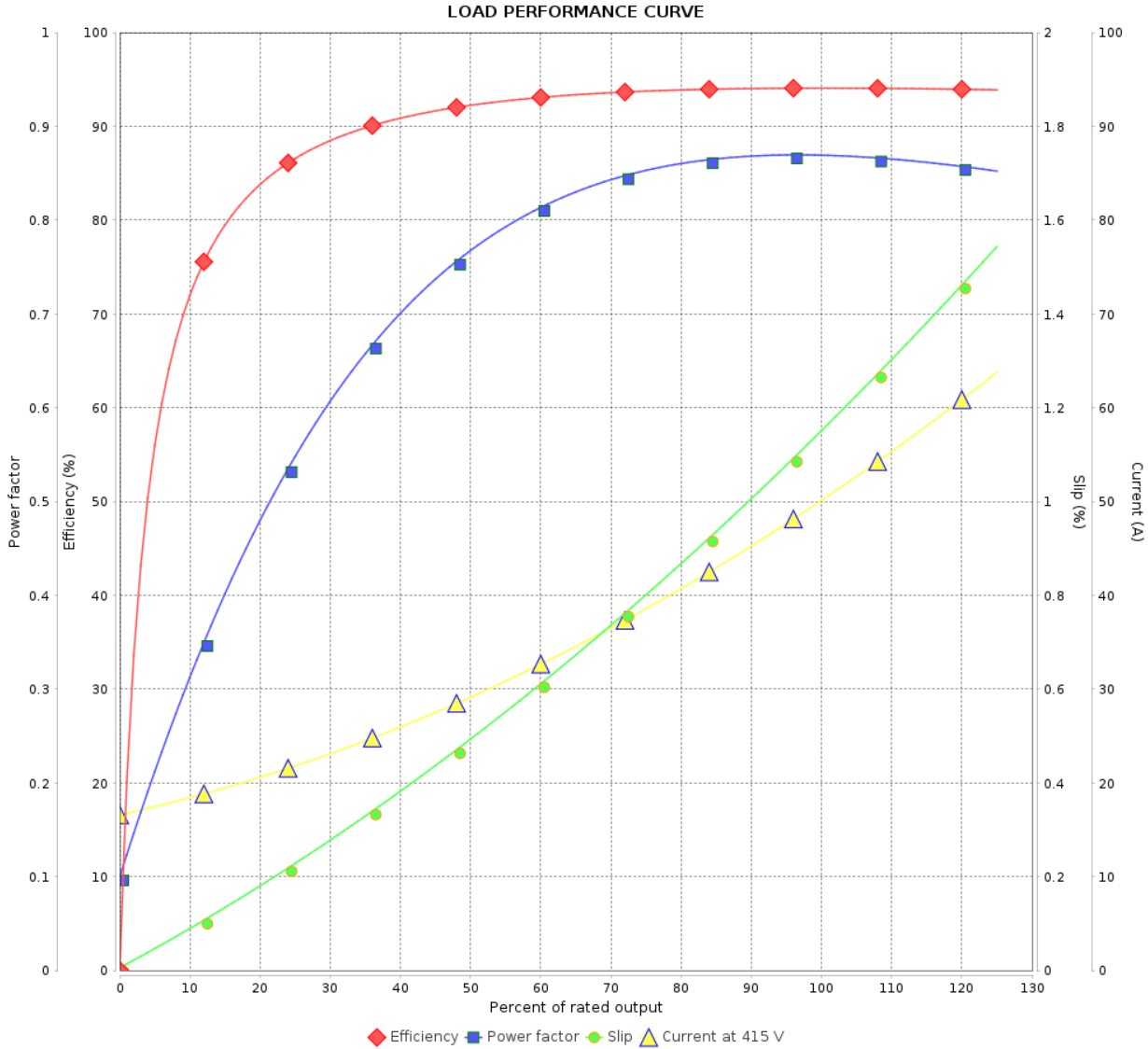
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Performance : 415 V 50 Hz 2P IE3

Rated current : 51.0 A
LRC : 7.9
Rated torque : 9.79 kgfm
Locked rotor torque : 280 %
Breakdown torque : 300 %
Rated speed : 2965 rpm

Moment of inertia (J) : 0.2284 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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