

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14480985			
Frame : 182/4TC Insulation class : F Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : B		Cooling method : IC411 - TEFC Mounting : F-1 Rotation ¹ : Both (CW and CCW) Starting method : Direct On Line Approx. weight ³ : 57.1 kg Moment of inertia (J) : 0.0062 kgm ²			
Output [HP]	3	3	3	3	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	7.52/3.76	4.44	4.27	4.16	
L. R. Amperes [A]	63.2/31.6	29.7	31.6	33.3	
LRC [A]	8.4x(Code K)	6.7x(Code H)	7.4x(Code J)	8.0x(Code J)	
No load current [A]	2.80/1.40	1.30	1.40	1.48	
Rated speed [RPM]	3510	2880	2890	2900	
Slip [%]	2.50	4.00	3.67	3.33	
Rated torque [kgfm]	0.620	0.756	0.753	0.751	
Locked rotor torque [%]	250	210	240	260	
Breakdown torque [%]	400	300	340	370	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	54s (cold) 30s (hot)	77s (cold) 43s (hot)	77s (cold) 43s (hot)	77s (cold) 43s (hot)	
Noise level ²	69.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	
Efficiency (%)	25%				
	50%	82.5	82.5	82.5	
	75%	85.5	85.5	85.5	
	100%	86.5	85.5	86.5	
Power Factor	25%				
	50%	0.73	0.78	0.75	
	75%	0.81	0.85	0.83	
	100%	0.85	0.88	0.86	
Bearing type : <u>Drive end</u> 6307 2RS <u>Non drive end</u> 6206 2RS Sealing : Oil Seal Lip Seal Lubrication interval : - - Lubricant amount : - - Lubricant type : Mobil Polyrex EM		Foundation loads Max. traction : 29 kgf Max. compression : 86 kgf			
Notes USABLE @208V 8.32A SF 1.15 SFA 9.56A					
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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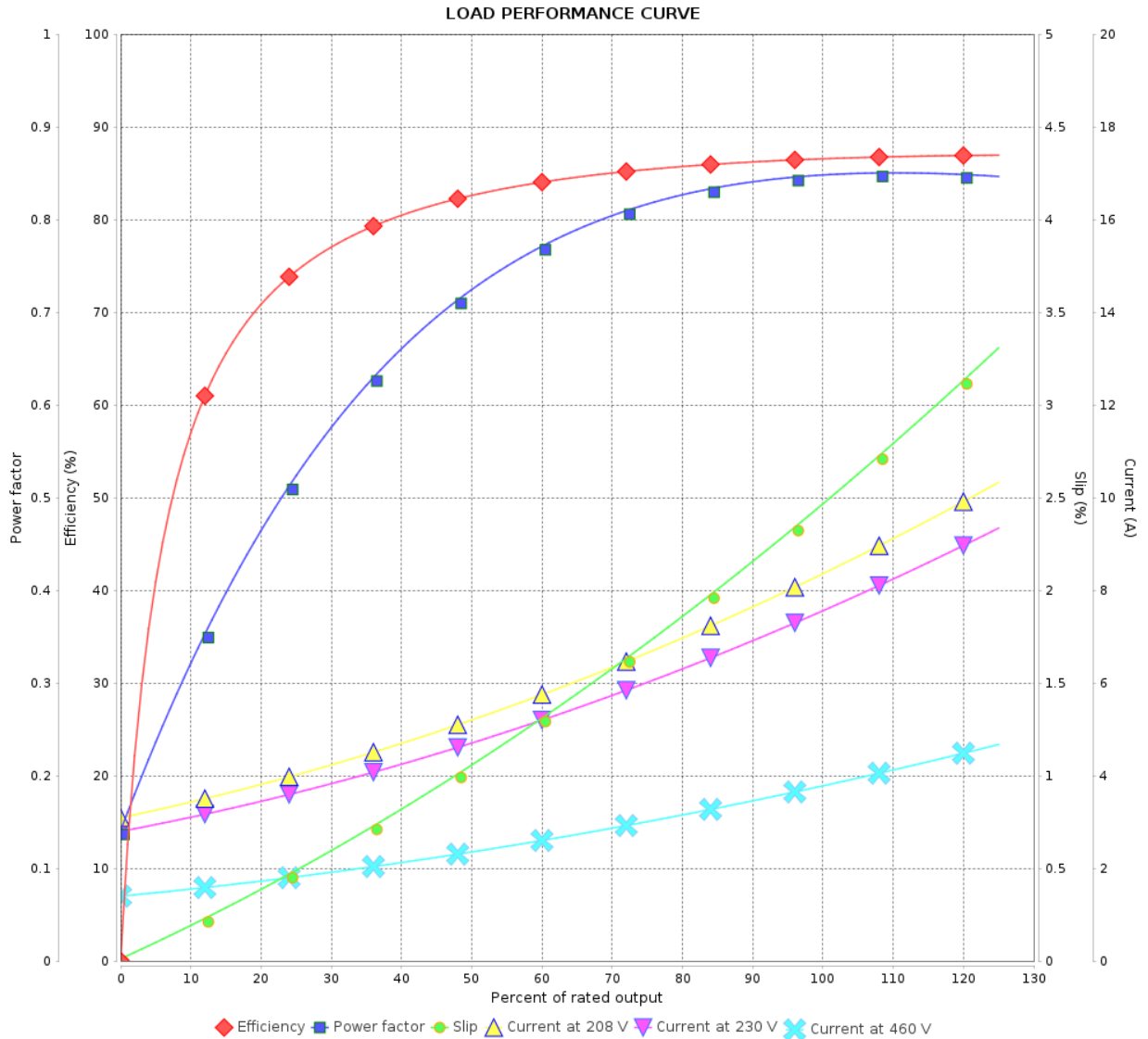
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Performance : 230/460 V 60 Hz 2P

Rated current : 7.52/3.76 A
 LRC : 8.4
 Rated torque : 0.620 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 400 %
 Rated speed : 3510 rpm

Moment of inertia (J) : 0.0062 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

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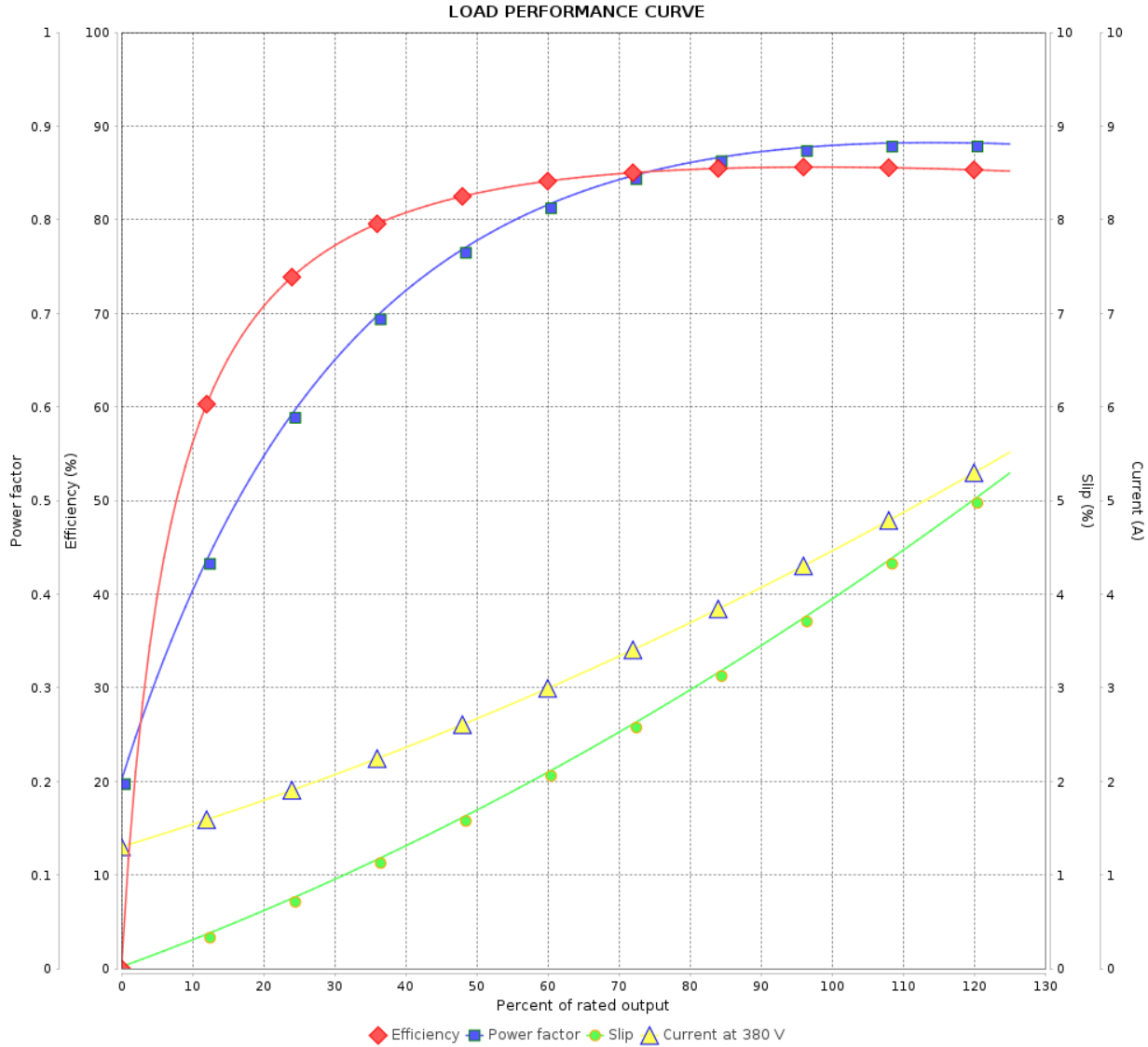
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Customer :

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Performance : 380 V 50 Hz 2P IE2

Rated current : 4.44 A
LRC : 6.7
Rated torque : 0.756 kgfm
Locked rotor torque : 210 %
Breakdown torque : 300 %
Rated speed : 2880 rpm

Moment of inertia (J) : 0.0062 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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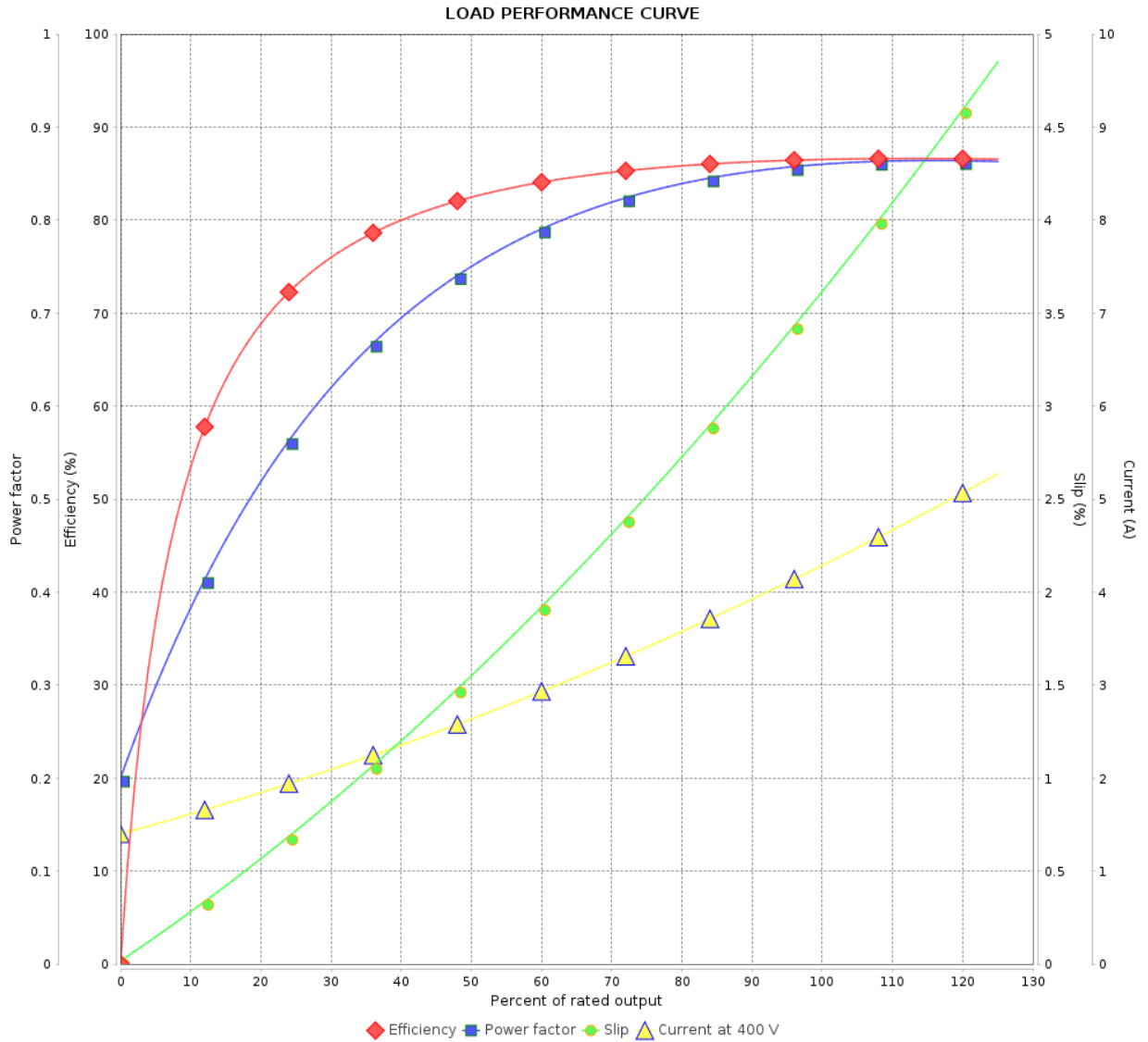
Three Phase Induction Motor - Squirrel Cage



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Performance : 400 V 50 Hz 2P IE3

Rated current : 4.27 A
 LRC : 7.4
 Rated torque : 0.753 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 340 %
 Rated speed : 2890 rpm

Moment of inertia (J) : 0.0062 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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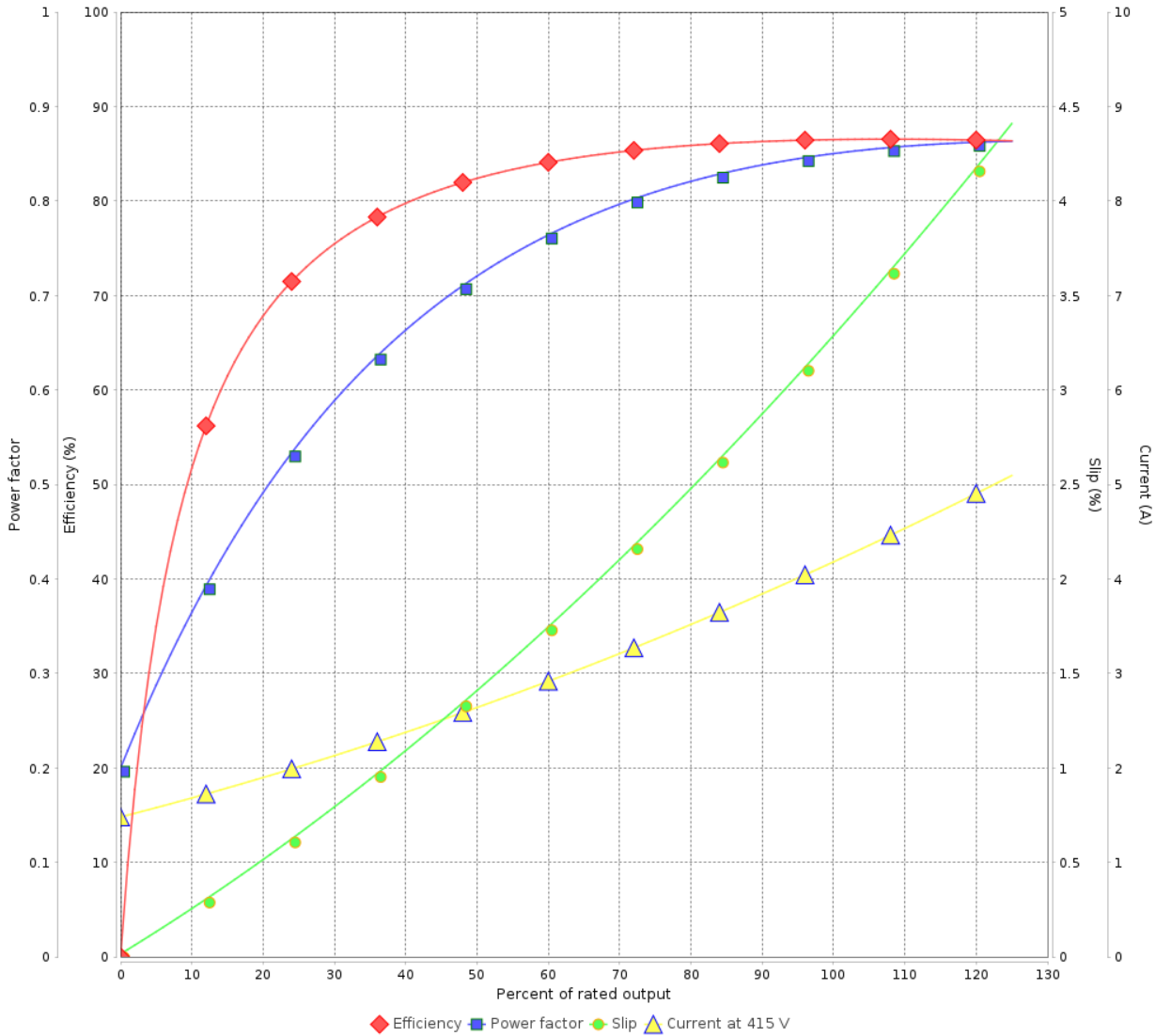


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Performance : 415 V 50 Hz 2P IE3

Rated current : 4.16 A
LRC : 8.0
Rated torque : 0.751 kgfm
Locked rotor torque : 260 %
Breakdown torque : 370 %
Rated speed : 2900 rpm

Moment of inertia (J) : 0.0062 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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