

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :				
Product line		: W21 Explosion Proof NEMA Premium Efficiency Three-Phase		Product code : 14325205
Frame	: 182/4T	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	: 60.3 kg	
Protection degree	: IP55	Moment of inertia (J)	: 0.0080 kgm ²	
Design	: B			
Output [HP]	5	5	5	5
Poles	2	2	2	2
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	12.2/6.10	7.30	6.94	6.84
L. R. Amperes [A]	91.5/45.7	41.6	44.4	47.2
LRC [A]	7.5x(Code J)	5.7x(Code F)	6.4x(Code G)	6.9x(Code H)
No load current [A]	4.40/2.20	2.15	2.40	2.60
Rated speed [RPM]	3490	2850	2865	2875
Slip [%]	3.06	5.00	4.50	4.17
Rated torque [kgfm]	1.04	1.27	1.27	1.26
Locked rotor torque [%]	250	200	229	260
Breakdown torque [%]	380	280	310	340
Service factor	1.15	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)	46s (cold) 26s (hot)
Noise level ²	69.0 dB(A)	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)
Efficiency (%)	25%			
	50%	85.5	86.5	86.5
	75%	87.5	87.5	87.5
	100%	88.5	86.5	87.5
Power Factor	25%			
	50%	0.70	0.76	0.72
	75%	0.81	0.86	0.83
	100%	0.86	0.89	0.88
Bearing type	: <u>Drive end</u> 6307 2RS <u>Non drive end</u> 6206 2RS	Foundation loads		
Sealing	: Oil Seal Lip Seal	Max. traction : 59 kgf		
Lubrication interval	: - -	Max. compression : 120 kgf		
Lubricant amount	: - -			
Lubricant type	: Mobil Polyrex EM			
Notes USABLE @208V 13.5A SF 1.15 SFA 15.5A				
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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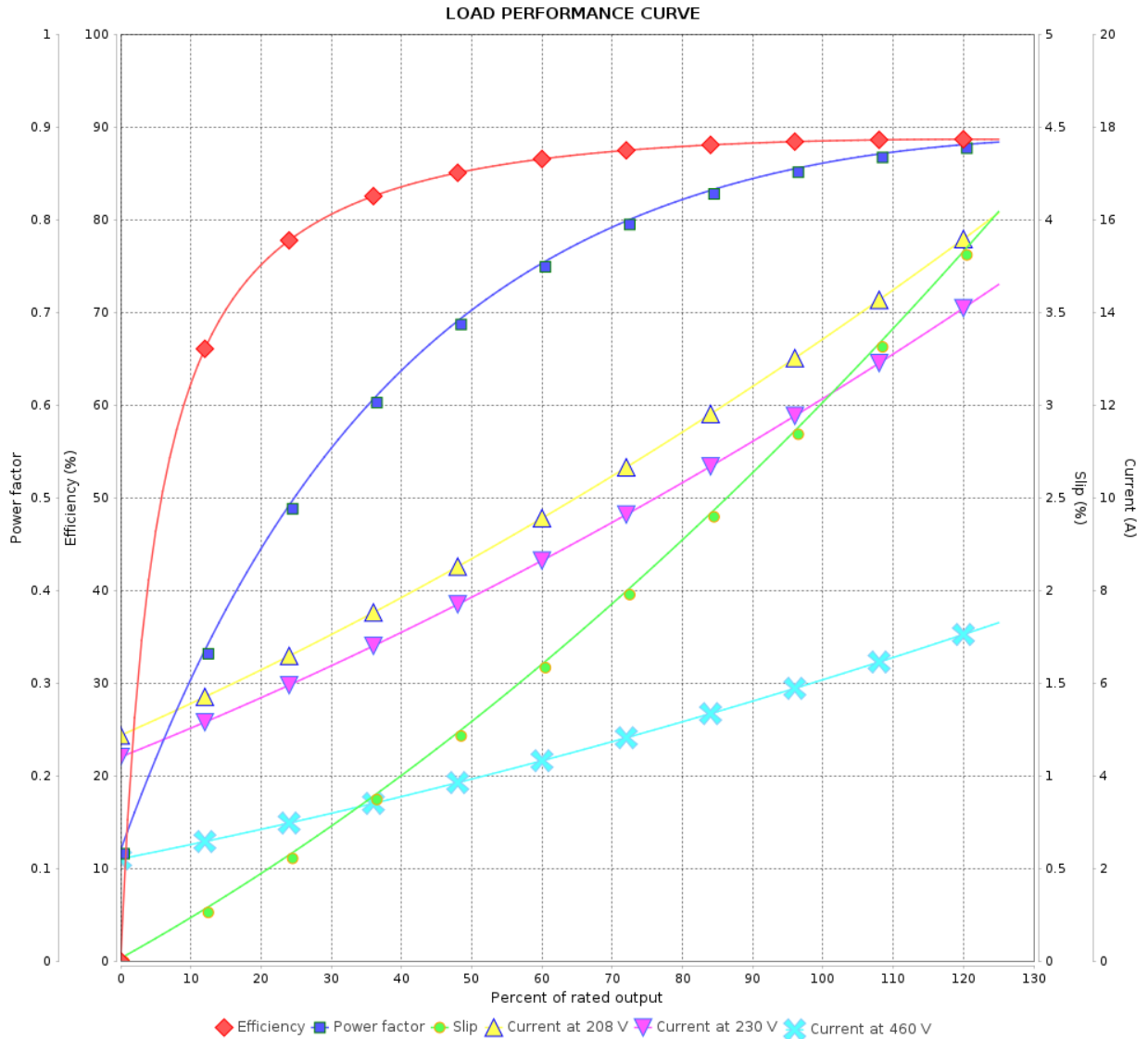
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Performance : 230/460 V 60 Hz 2P

Rated current : 12.2/6.10 A
 LRC : 7.5
 Rated torque : 1.04 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 380 %
 Rated speed : 3490 rpm

Moment of inertia (J) : 0.0080 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

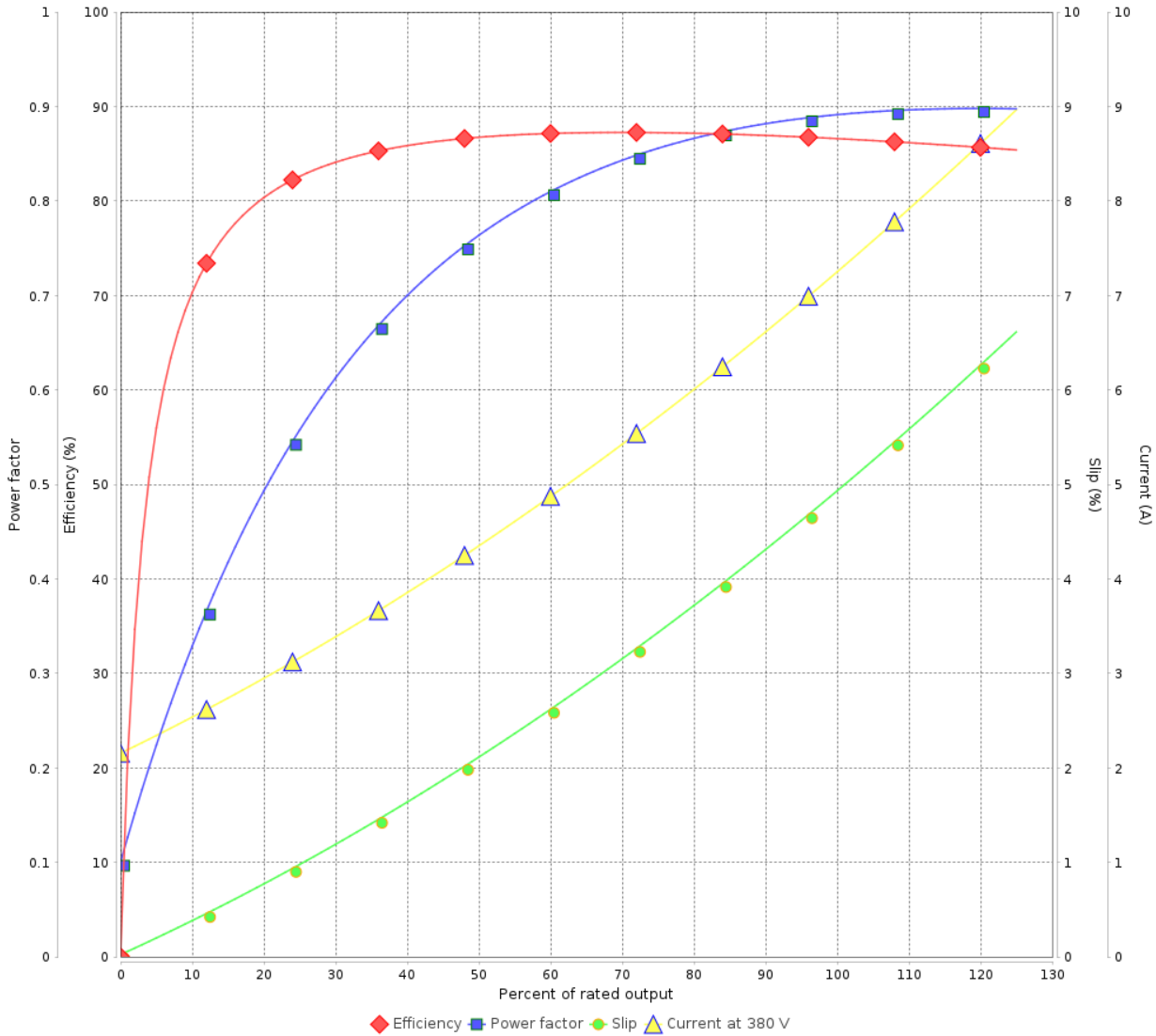


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Performance : 380 V 50 Hz 2P IE2

Rated current : 7.30 A
LRC : 5.7
Rated torque : 1.27 kgfm
Locked rotor torque : 200 %
Breakdown torque : 280 %
Rated speed : 2850 rpm

Moment of inertia (J) : 0.0080 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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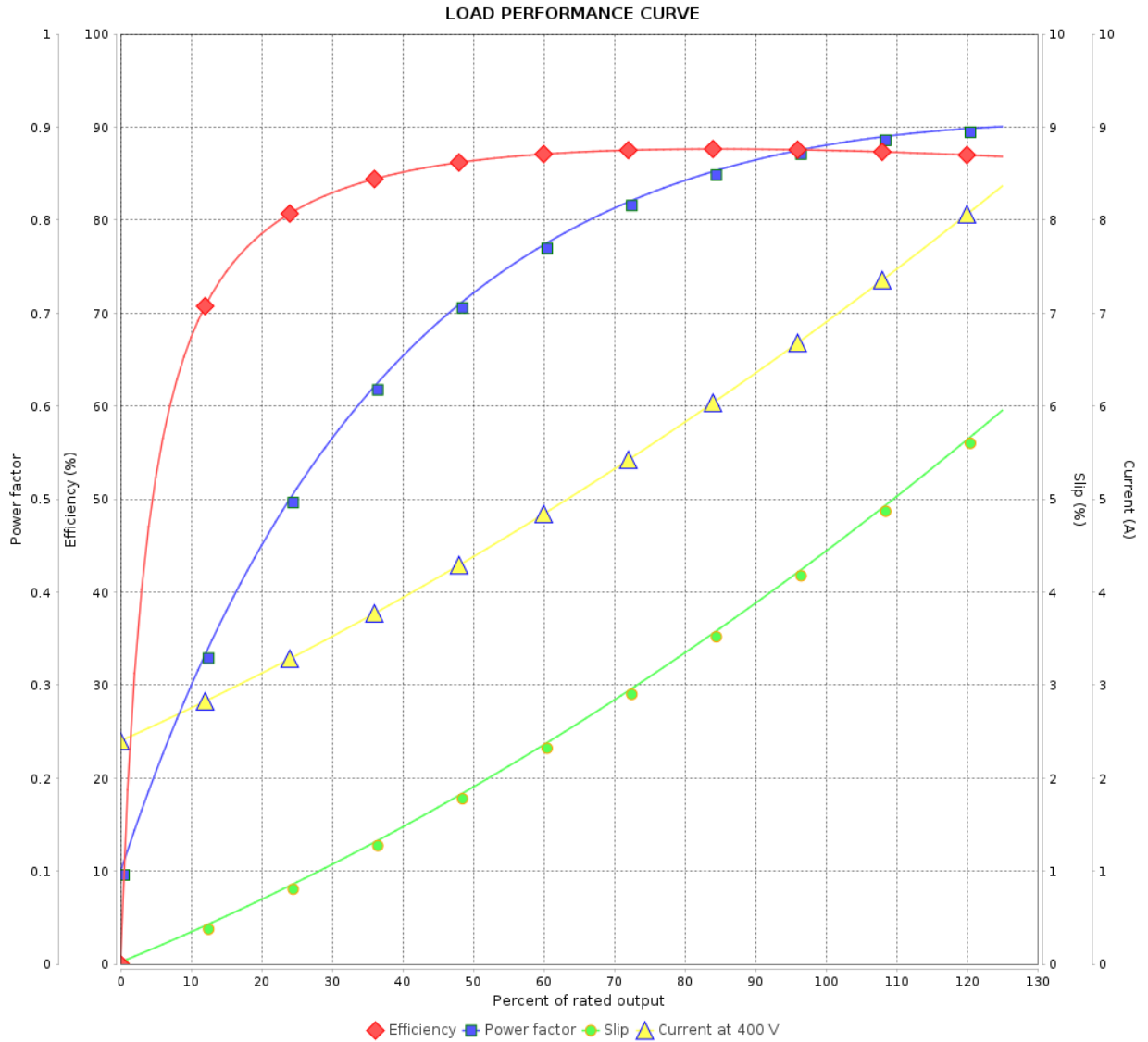
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 400 V 50 Hz 2P IE2

Rated current : 6.94 A
LRC : 6.4
Rated torque : 1.27 kgfm
Locked rotor torque : 229 %
Breakdown torque : 310 %
Rated speed : 2865 rpm

Moment of inertia (J) : 0.0080 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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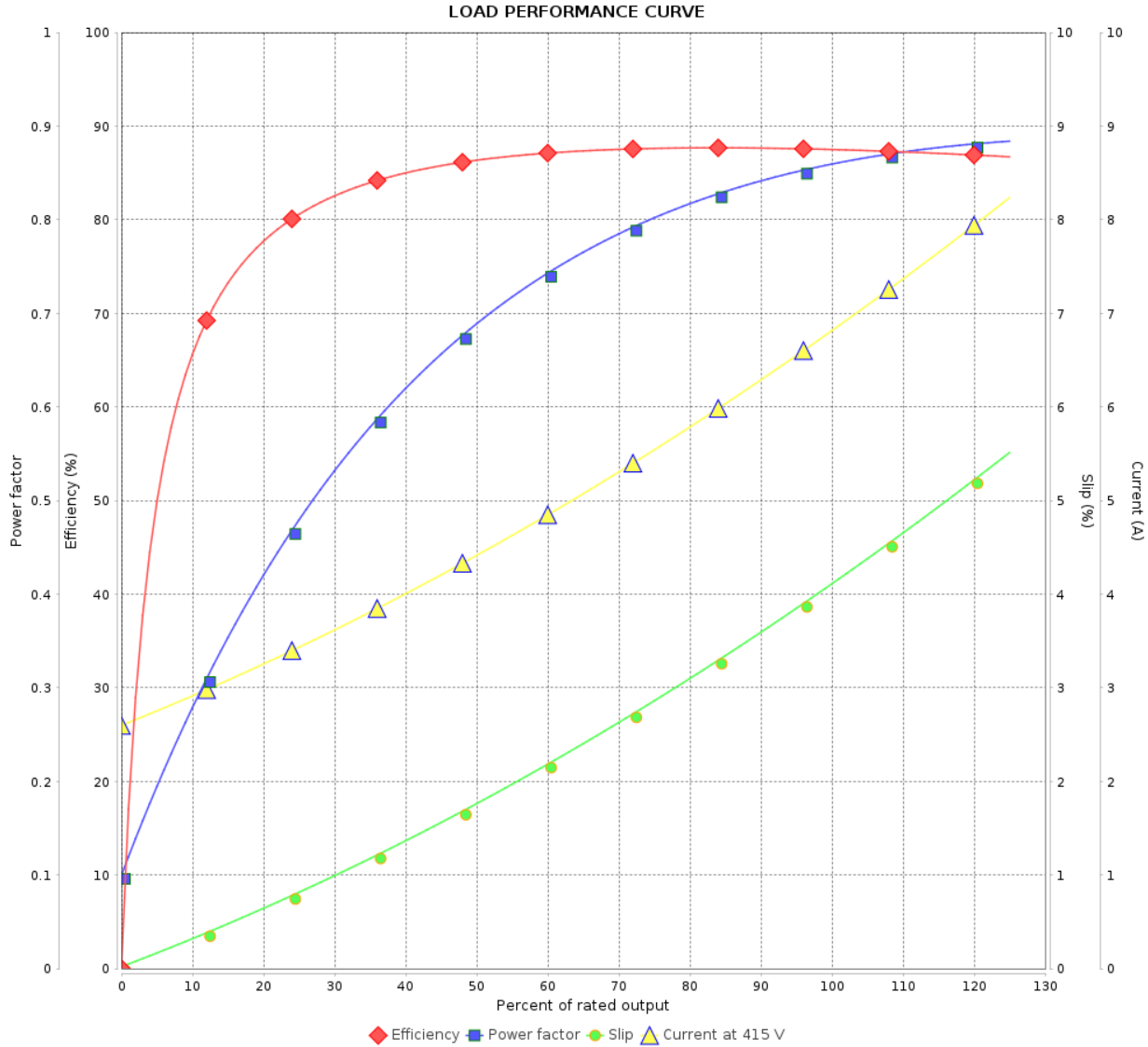
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Performance : 415 V 50 Hz 2P IE2

Rated current : 6.84 A
LRC : 6.9
Rated torque : 1.26 kgfm
Locked rotor torque : 260 %
Breakdown torque : 340 %
Rated speed : 2875 rpm

Moment of inertia (J) : 0.0080 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : B

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