## **DATA SHEET**

Checked by

Date

13/01/2024

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 IEEE 841 NEMA Premium Efficiency Product code: 11937251 Three-Phase Frame : 182/4T Cooling method : IC411 - TEFC Insulation class Mounting : F-1 : F Duty cycle : Cont.(S1) Rotation<sup>1</sup> : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line : 1000 m.a.s.l. Approx. weight<sup>3</sup> Altitude : 0.0 kg Protection degree : IP55 Moment of inertia (J) : 0.0243 kgm<sup>2</sup> Design : B Output [HP] 1.5 1.5 1.5 1.5 Poles 8 8 8 8 Frequency [Hz] 60 50 50 50 Rated voltage [V] 460 380 400 415 Rated current [A] 2.70 3.04 3.01 2.99 L. R. Amperes [A] 15.9 15.2 16.6 17.9 LRC [A] 5.9x(Code K) 5.0x(Code H) 5.5x(Code J) 6.0x(Code K) No load current [A] 2.00 1.90 2.00 2.10 Rated speed [RPM] 865 705 710 715 Slip [%] 3.89 6.00 5.33 4.67 Rated torque [kgfm] 1.27 1.56 1.54 1.53 Locked rotor torque [%] 290 229 260 290 Breakdown torque [%] 340 260 290 320 Service factor 1.25 1.00 1.00 1.00 80 K Temperature rise 80 K 80 K 80 K Locked rotor time 30s (cold) 17s (hot) 30s (cold) 17s (hot) 30s (cold) 17s (hot) 30s (cold) 17s (hot) Noise level<sup>2</sup> 50.0 dB(A) 46.0 dB(A) 46.0 dB(A) 46.0 dB(A) 25% 50% 80.0 80.0 78.5 77.0 Efficiency (%) 75% 82.5 80.0 80.0 80.0 100% 82.5 78.5 80.0 80.0 25% 50% 0.43 0.51 0.47 0.44 Power Factor 75% 0.54 0.62 0.58 0.55 0.62 0.70 0.66 0.64 100% Losses at normative operating points (speed;torque), in percentage of rated output power 20.4 20.4 P1 (0,9;1,0) 20.4 20.4 P2 (0,5;1,0) 17.4 17.4 17.4 17.4 P3 (0,25;1,0) 16.9 16.9 16.9 16.9 P4 (0,9;0,5) 13.0 13.0 Losses (%) 13.0 13.0 P5 (0,5;0,5) 10.0 10.0 10.0 10.0 P6 (0,5;0,25) 8.3 8.3 8.3 8.3 P7 (0,25;0,25) 6.7 6.7 6.7 6.7 Drive end Non drive end Foundation loads 6207 C3 6206 C3 Bearing type Max. traction : 102 kgf Sealing **Taconite** Taconite Max. compression : 102 kgf Labyrinth Labyrinth 20000 h 20000 h Lubrication interval Lubricant amount 5 g Lubricant type Mobil Polyrex EM This revision replaces and cancel the previous one, which These are average values based on tests with sinusoidal must be eliminated. power supply, subject to the tolerances stipulated in NEMA (1) Looking the motor from the shaft end. MG-1. (2) Measured at 1m and with tolerance of +3dB(A). **Changes Summary** Performed Checked Date Rev. Performed by

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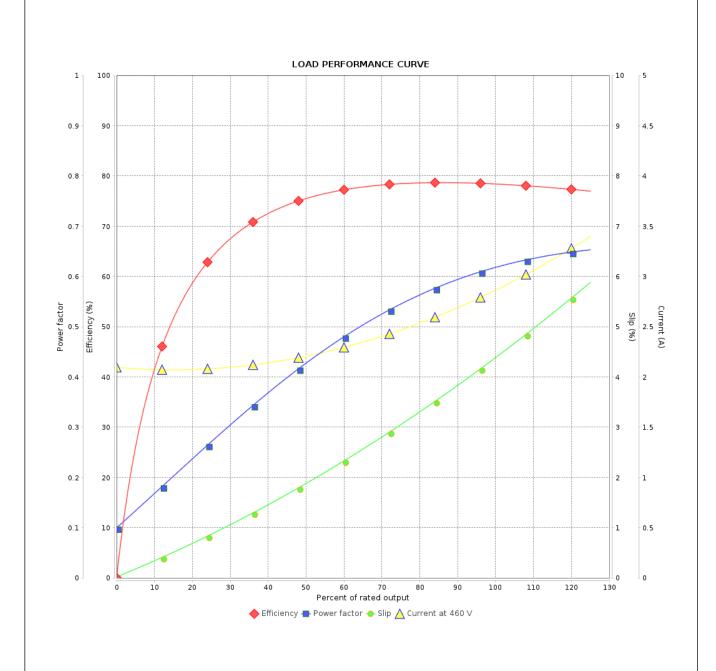
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Product code : 11937251

Three-Phase



Performance	: 460 V 60 Hz 8P			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 2.70 A : 5.9 : 1.27 kgfm : 290 % : 340 % : 865 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.0243 kgm² : Cont.(S1) : F : 1.25 : 80 K : B	

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### Three Phase Induction Motor - Squirrel Cage



Customer :

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Product line : W22 IEEE 841 NEMA Premium Efficiency

Three Phase

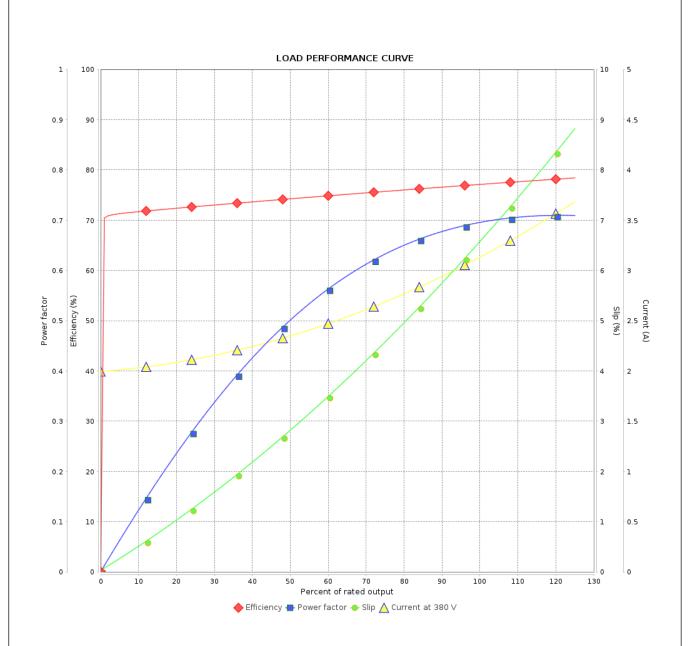
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Performance : 380 V 50 Hz 8P IE3 : 0.0243 kgm<sup>2</sup> Rated current : 3.04 A Moment of inertia (J) **LRC** Duty cycle : Cont.(S1) : 5.0 Insulation class Rated torque : 1.56 kgfm : F : 229 % Locked rotor torque Service factor : 1.00 Breakdown torque : 260 % Temperature rise : 80 K Rated speed : 705 rpm Design : B Rev. Performed Checked Date **Changes Summary** Performed by

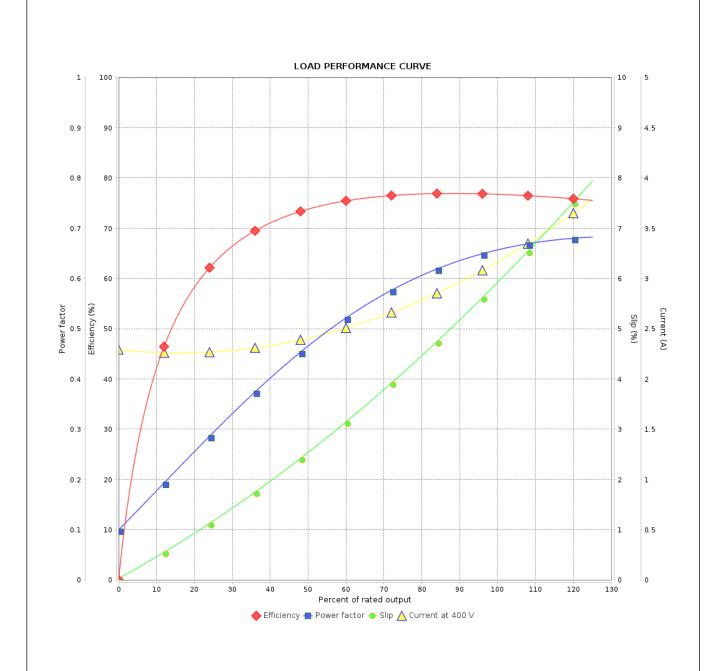
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Product code : 11937251

Three-Phase



Performance	: 400 V 50 Hz 8P IE3				
Rated current	: 3.01 A	Moment of inertia (J)		: 0.0243 kgm²	
LRC	: 5.5	Duty cycle		: Cont.(S1)	
Rated torque	: 1.54 kgfm	Insulation class		:F	
Locked rotor torque	: 260 %	Service factor		: 1.00	
Breakdown torque	: 290 %	Temperature rise		: 80 K	
Rated speed	: 710 rpm	Design		: B	
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## Three Phase Induction Motor - Squirrel Cage



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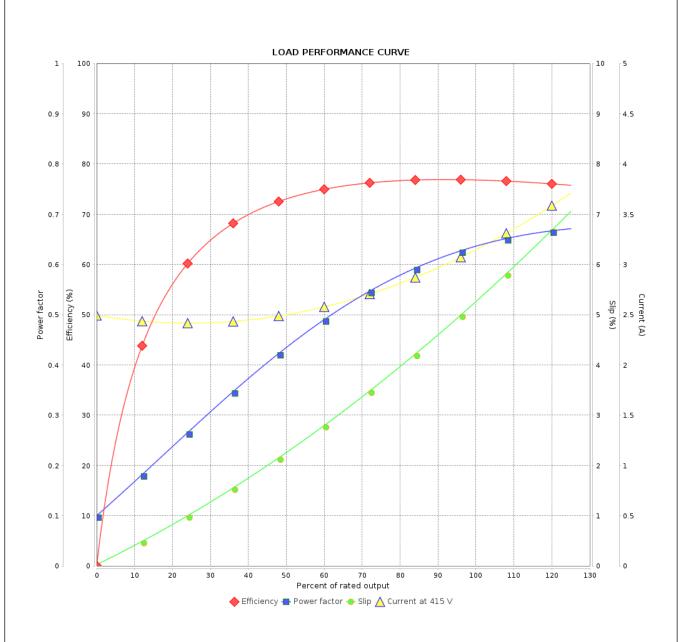
Product line : W22 IEEE 841 NEMA Premium Efficiency

Three Phase

Product code:

11937251

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Performance	:	415 V 50 Hz 8P IE	=3			
Rated current LRC Rated torque		2.99 A 6.0 1.53 kgfm	5.0 Duty cycle		: 0.0243 kgm² : Cont.(S1) : F	
Locked rotor toro Breakdown torqu Rated speed	que : ie :	290 % 320 % 715 rpm	Service f	Service factor Temperature rise		
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