## DATA SHEET

Checked by

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 IEEE 841 NEMA Premium Product code: 11943024 Efficiency Three-Phase Cooling method Frame : 324TS : 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 Approx. weight<sup>3</sup> Altitude : 1000 m.a.s.l. : 0.0 kg Protection degree : IP55 Moment of inertia (J) : 0.2063 kgm<sup>2</sup> Design : B Output [HP] 40 30 30 40 40 30 40 Poles 2 2 2 2 2 2 2 50 50 50 50 Frequency [Hz] 60 50 50 Rated voltage [V] 380 400 460 380 400 415 415 56.9 Rated current [A] 46.3 41.0 39.4 38.4 53.7 51.7 L. R. Amperes [A] 292 295 296 292 285 301 321 LRC [A] 6.3x(Code T.2x(Code H))7.5x(Code H))7.6x(Code H))5.0x(Code E) 5.6x(Code F) 6.2x(Code G) G) No load current [A] 11.0 12.0 11.0 12.0 10.0 11.0 12.0 Rated speed [RPM] 3555 2960 2965 2970 2930 2940 2950 Slip [%] 1.25 1.33 1.17 1.00 2.33 2.00 1.67 Rated torque [kgfm] 8.17 7.36 7.34 7.33 9.91 9.87 9.84 Locked rotor torque [%] 250 240 270 290 180 200 220 Breakdown torque [%] 240 250 280 310 200 210 229 Service factor 1.25 1.00 1.00 1.00 1.00 1.00 1.00 Temperature rise 80 K 80 K 80 K 80 K 105 K 105 K 105 K 27s (cold) Locked rotor time 39s (cold) 27s (cold) 27s (cold) 27s (cold) 27s (cold) 27s (cold) 15s (hot) 22s (hot) 15s (hot) 15s (hot) 15s (hot) 15s (hot) 15s (hot) Noise level<sup>2</sup> 76.0 dB(A) 72.0 dB(A) 72.0 dB(A) 72.0 dB(A) 72.0 dB(A) 72.0 dB(A) 72.0 dB(A) 25% 50% 91.7 90.9 90.3 90.7 91.7 91.7 91.7 Efficiency (%) 75% 92.4 91.8 91.7 92.1 91.7 91.7 92.4 100% 92.4 92.7 92.7 92.7 91.0 91.7 91.7 25% 50% 0.80 0.77 0.75 0.73 0.84 0.82 0.80 Power Factor 75% 0.86 0.85 0.83 0.82 0.88 0.87 0.86 100% 0.88 0.88 0.87 0.86 0.88 0.88 0.88 Losses at normative operating points (speed;torque), in percentage of rated output power P1 (0,9;1,0) 8.9 8.6 8.6 8.6 9.9 9.9 10.8 P2 (0,5;1,0) 7.3 6.9 6.9 6.9 9.0 8.2 8.2 P3 (0,25;1,0) 6.2 6.2 6.5 6.2 8.3 7.4 7.4 P4 (0,9;0,5) 4.4 4.2 4.2 4.2 5.2 4.8 4.8 Losses (%) P5 (0,5;0,5) 2.7 2.7 2.8 2.7 3.4 3.1 3.1 P6 (0,5;0,25) 1.8 1.7 1.7 1.7 2.2 2.0 2.0 P7 1.2 1.1 1.5 1.4 1.1 1.1 1.4 (0,25;0,25)Drive end Non drive end Foundation loads Bearing type 6312 C3 6212 C3 : 285 kgf Max. traction Taconite **Taconite** Sealing : 285 kgf Max. compression Labyrinth Labyrinth Lubrication interval 12000 h 15000 h Lubricant amount 21 a 13 g Lubricant type Mobil Polyrex EM Rev. **Changes Summary** Performed Checked Date Performed by

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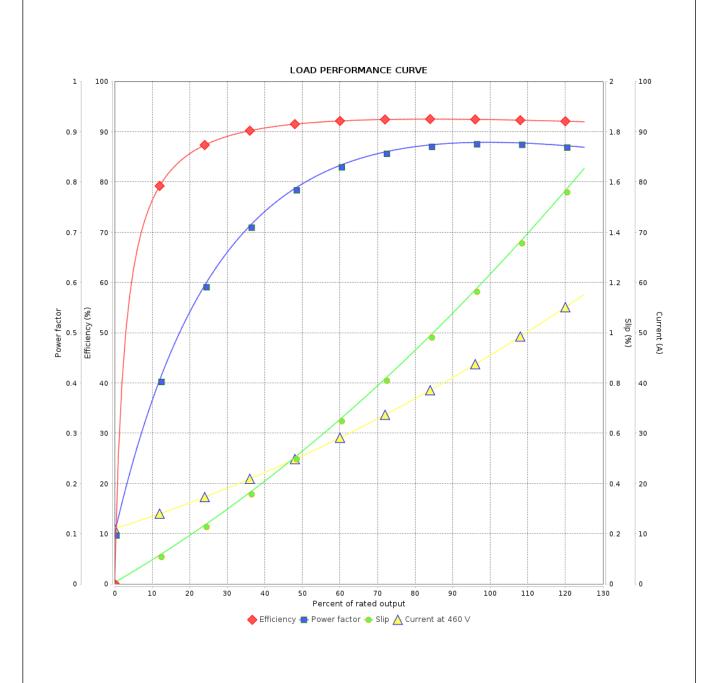


11943024

Customer :

Product line : W22 IEEE 841 NEMA Premium Product code :

Efficiency Three-Phase



Performance	: 460 V 60 Hz 2P				
Rated current	: 46.3 A	Moment of inertia (J)		: 0.2063 kgm²	
LRC	: 6.3	Duty cycle		: Cont.(S1)	
Rated torque	: 8.17 kgfm	Insulation class		: F	
Locked rotor torque	: 250 %	Service factor		: 1.25	
Breakdown torque	: 240 %	Temperature rise		: 80 K	
Rated speed	: 3555 rpm	Design		: B	
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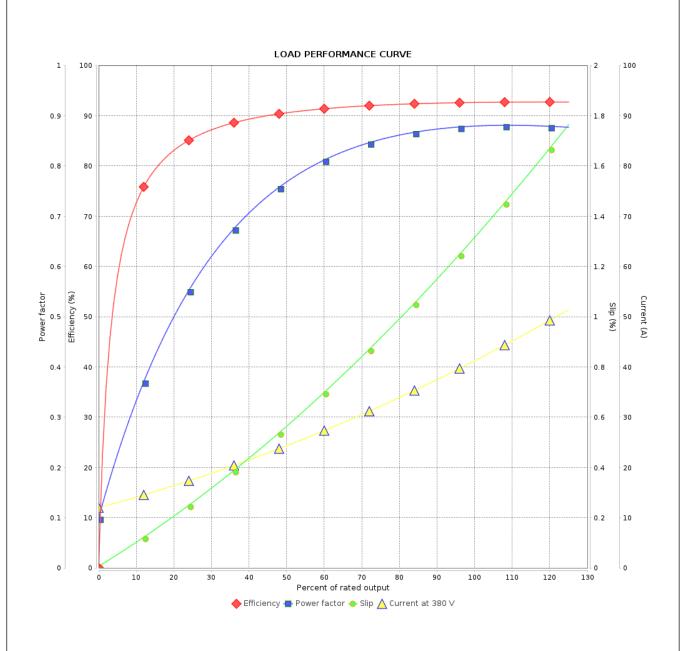


Customer :

Product line : W22 IEEE 841 NEMA Premium

Efficiency Three-Phase

Product code: 11943024



Performance	: 380 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 41.0 A : 7.2 : 7.36 kgfm : 240 % : 250 % : 2960 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.2063 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
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## Three Phase Induction Motor - Squirrel Cage



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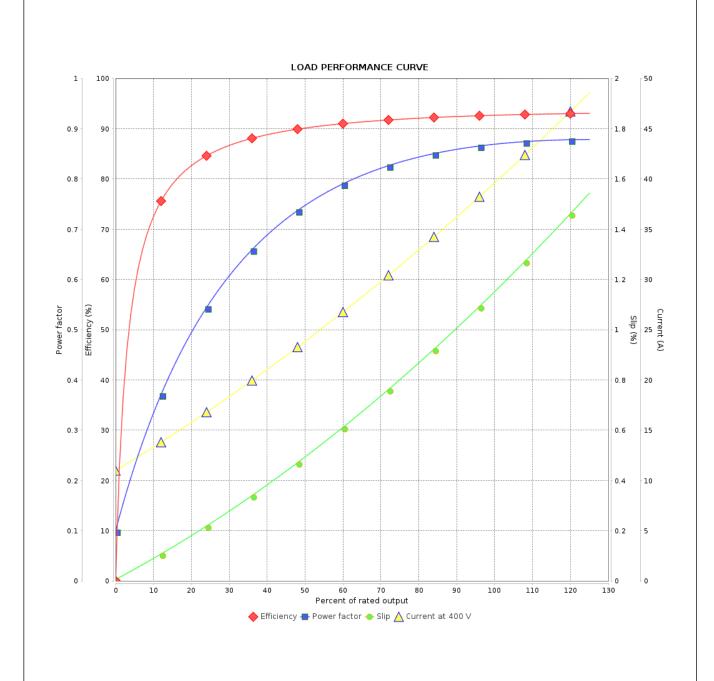
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Product line : W22 IEEE 841 NEMA Premium Product code :

Efficiency Three-Phase



Performance	: 400 V 50 Hz 2P IE3				
Rated current	: 39.4 A	Moment of inertia (J)		: 0.2063 kgm²	
LRC	: 7.5	Duty cycle		: Cont.(S1)	
Rated torque	: 7.34 kgfm	Insulation class		: F	
Locked rotor torque	: 270 %	Service factor		: 1.00	
Breakdown torque	: 280 %	Temperature rise		: 80 K	
Rated speed	: 2965 rpm	Design		: B	
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## Three Phase Induction Motor - Squirrel Cage

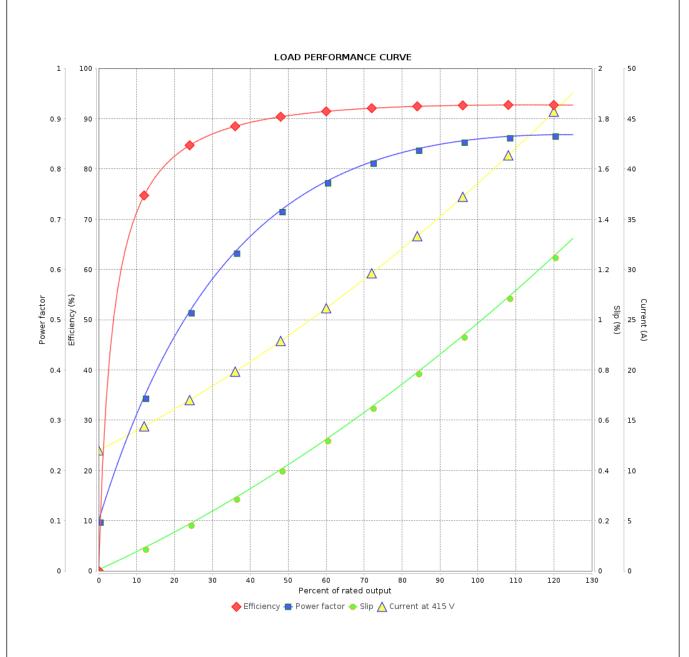


Customer :

Product line : W22 IEEE 841 NEMA Premium

Efficiency Three-Phase

Product code: 11943024



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Performance	: 415 V 50 Hz 2P IE3				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 38.4 A : 7.6 : 7.33 kgfm : 290 % : 310 % : 2970 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.2063 kgm² : Cont.(S1) : F : 1.00 : 80 K : B	
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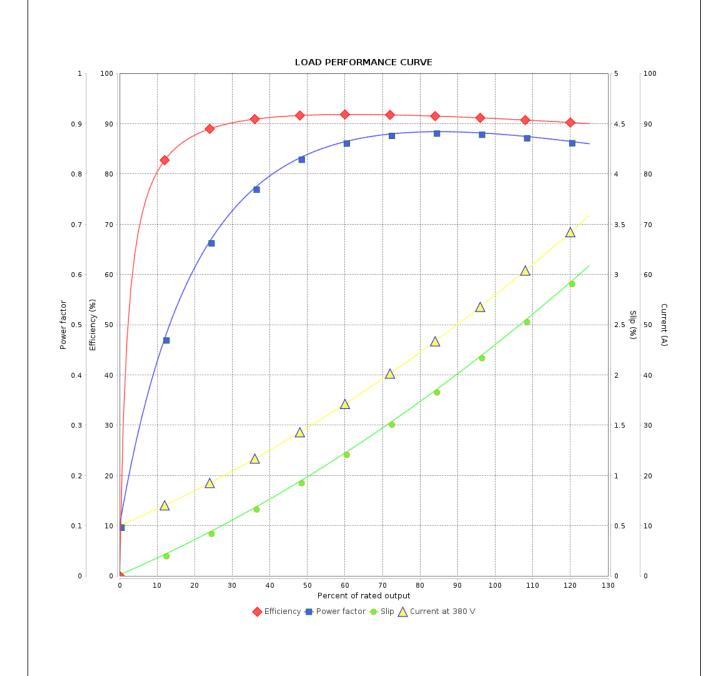
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Performance	: 380 V 50 Hz 2P IE1				
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 56.9 A : 5.0 : 9.91 kgfm : 180 % : 200 % : 2930 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.2063 kgm² : Cont.(S1) : F : 1.00 : 105 K : B	
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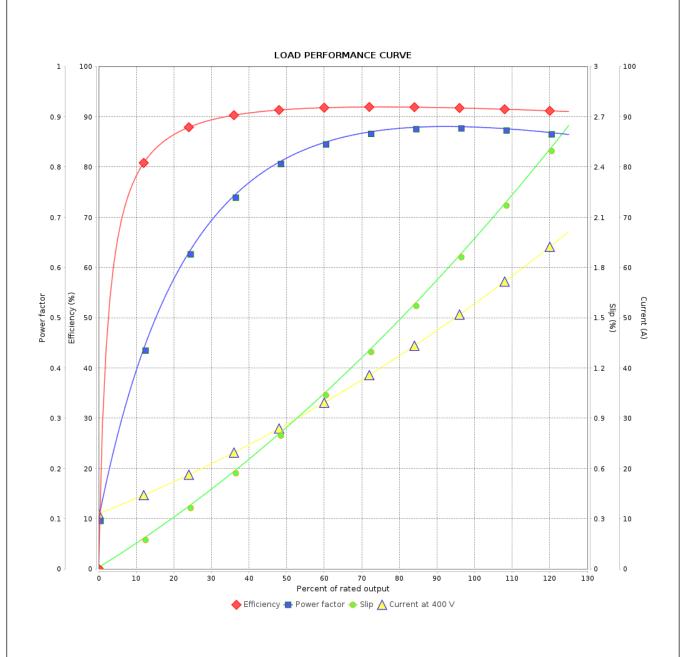


Customer :

Product line : W22 IEEE 841 NEMA Premium

Efficiency Three-Phase

Product code: 11943024



Performance	: 400 V 50 Hz 2P IE1			
Rated current LRC Rated torque Locked rotor torque Breakdown torque Rated speed	: 53.7 A : 5.6 : 9.87 kgfm : 200 % : 210 % : 2940 rpm	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design	: 0.2063 kgm² : Cont.(S1) : F : 1.00 : 105 K : B	
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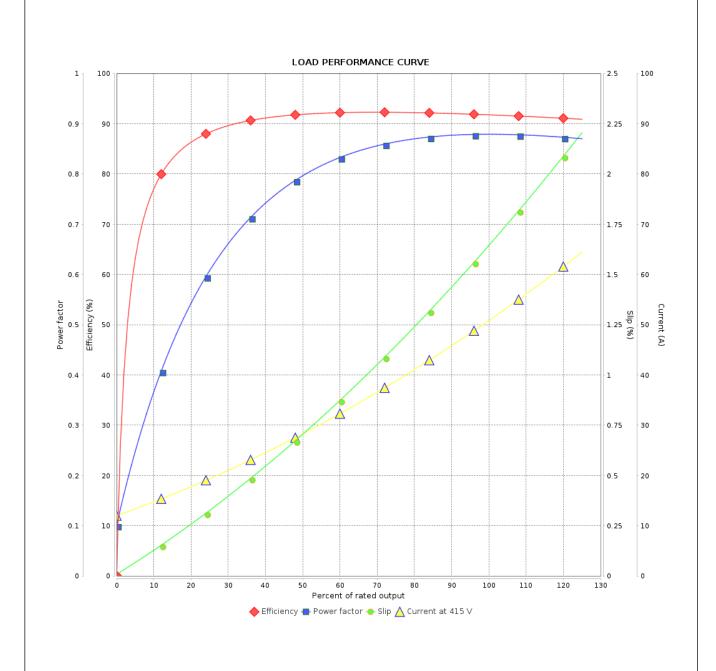
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Product line : W22 IEEE 841 NEMA Premium Prod

Efficiency Three-Phase

Product code: 11943024



Performance : 415 V 50 Hz 2P IE1 Rated current : 51.7 A Moment of inertia (J) : 0.2063 kgm<sup>2</sup> **LRC** : 6.2 Duty cycle : Cont.(S1) Insulation class : F Rated torque : 9.84 kgfm Locked rotor torque : 220 % Service factor : 1.00 Breakdown torque : 229 % Temperature rise : 105 K Rated speed : 2950 rpm Design : B Date Rev. Performed Checked **Changes Summary** Performed by

