### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 Tru-Metric IE3 Three-Phase Product code: 12596605 : 180L Cooling method : IC411 - TEFC Frame Mounting Insulation class : F : B3L(E) Duty cycle : S1 Rotation<sup>1</sup> : Both (CW and CCW) Ambient temperature : -20°C to +40°C Starting method : Direct On Line Altitude : 1000 m.a.s.l. Approx. weight<sup>3</sup> : 202 kg Moment of inertia (J) Protection degree : IP55 : 0.2272 kgm<sup>2</sup> : N Design 30 Output [HP] 30 30 Poles 4 4 4 Frequency [Hz] 50 50 60 Rated voltage [V] 380 415 230/460 Rated current [A] 42.3 40.4 72.0/36.0 L. R. Amperes [A] 317 351 684/342 LRC [A] 7.5 8.7 9.5 No load current [A] 16.5 33.6/16.8 19.5 Rated speed [RPM] 1475 1778 1470 Slip [%] 2.00 1.67 1.22 Rated torque [kgfm] 12.2 14.8 14.8 270 Locked rotor torque [%] 340 360 Breakdown torque [%] 380 300 360 Service factor 1.25 1.25 1.25 Temperature rise 80 K 80 K 80 K Locked rotor time 21s (cold) 12s (hot) 21s (cold) 12s (hot) 32s (cold) 18s (hot) Noise level<sup>2</sup> 61.0 dB(A) 61.0 dB(A) 63.0 dB(A) 25% 90.2 90.2 50% 91.0 Efficiency (%) 75% 93.1 92.8 92.4 100% 93.0 93.2 93.6 25% 0.70 0.62 0.65 50% Power Factor 75% 0.80 0.74 0.76 100% 0.85 0.81 0.82 Losses at normative operating points (speed;torque), in percentage of rated output power P1 (0,9;1,0) 7.2 7.0 6.5 P2 (0,5;1,0) 5.5 5.3 5.0 P3 (0,25;1,0) 4.9 4.7 4.4 Losses (%) P4 (0,9;0,5) 4.2 4.1 3.8 P5 (0,5;0,5) 2.7 2.6 2.4 P6 (0,5;0,25) 2.0 2.0 1.8 P7 (0,25;0,25) 1.3 1.2 Drive end Non drive end Foundation loads Bearing type 6311 C3 6211 C3 : 566 kgf Max traction V'Rina V'Rina : 768 kgf Sealing Max. compression Lubrication interval 20000 h 20000 h Lubricant amount 11 g Mobil Polyrex EM Lubricant type 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). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.

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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



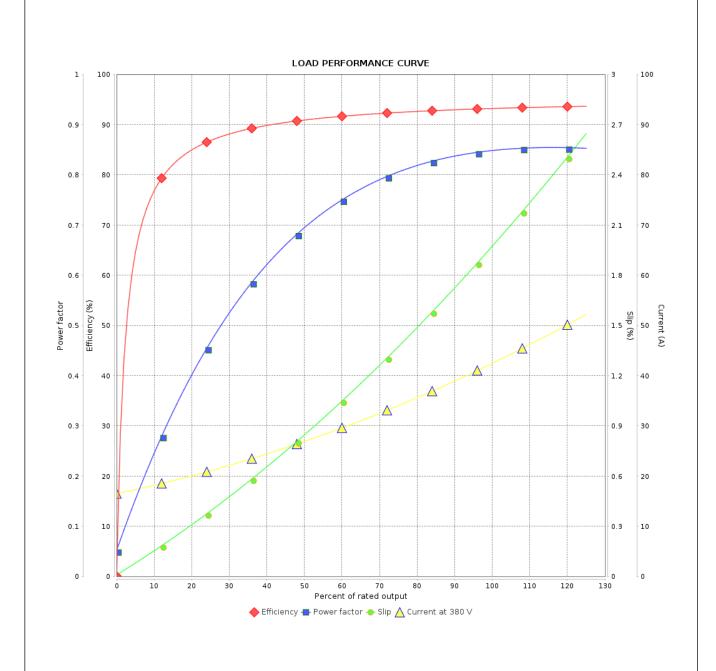
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Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596605



Performance		: 380 V 50 Hz 4P					
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	•	: 42.3 A : 7.5 : 14.8 kgfm : 270 % : 300 % : 1470 rpm	D Ir S To	outy cyclensulation ervice faction emperatu	class ctor	: 0.2272 kgm² : S1 : F : 1.25 : 80 K : N	2
Rated speed		. 1470 Ipili		esign		. IN	
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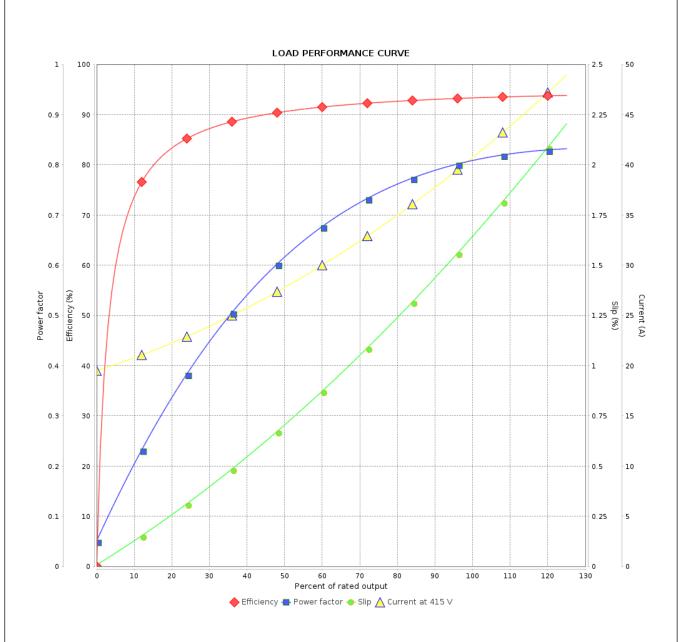
# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596605



Performance	: 415 V 50 Hz 4P				
Rated current	: 40.4 A	Moment of inertia (J)		: 0.2272 kgm²	
LRC	: 8.7	Duty cycle		: S1	
Rated torque	: 14.8 kgfm	Insulation class		: F	
Locked rotor torque	: 340 %	Service factor		: 1.25	
Breakdown torque	: 360 %	Temperature rise		: 80 K	
Rated speed	: 1475 rpm	Design		: N	
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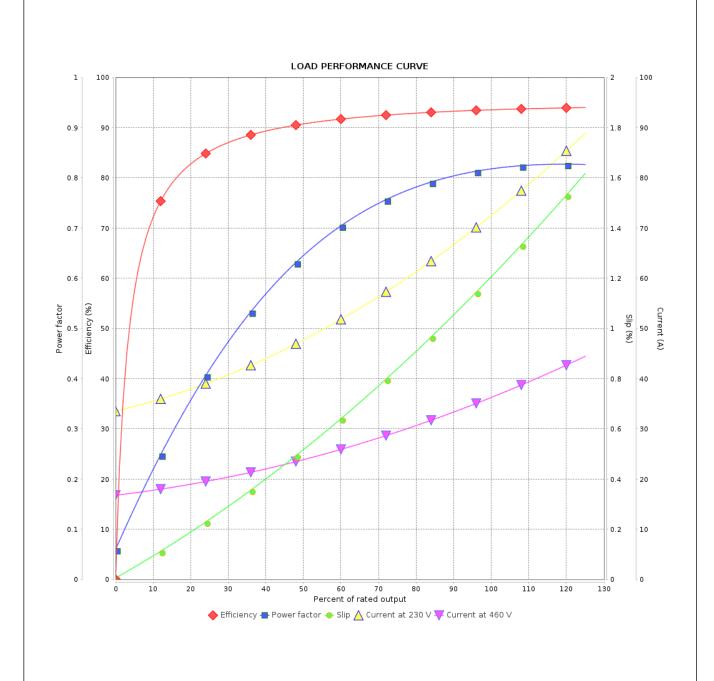
# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596605



Performance	: 230	/460 V 60 Hz 4P					
Rated current LRC Rated torque Locked rotor torqu Breakdown torque Rated speed	: 9.5 : 12.2 ue : 360 : 380		Duty cycle Insulation Service fa	Moment of inertia (J) Duty cycle Insulation class Service factor Temperature rise Design		: 0.2272 kgm² : S1 : F : 1.25 : 80 K : N	
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