### **DATA SHEET**

#### Three Phase Induction Motor - Squirrel Cage



Customer Product line : W22 Tru-Metric IE3 Three-Phase Product code: 12613699 : IC411 - TEFC Frame : 160M Cooling method Insulation class Mounting : B35L(E) : F 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> : 141 kg Protection degree : IP55 Moment of inertia (J) : 0.1004 kgm<sup>2</sup> Design : N 15 Output [HP] 15 15 Poles 4 4 4 Frequency [Hz] 50 50 60 Rated voltage [V] 380 415 230/460 Rated current [A] 21.5 20.7 36.4/18.2 L. R. Amperes [A] 161 176 309/155 LRC [A] 7.5 8.5 8.5 18.2/9.08 No load current [A] 9.00 10.2 Rated speed [RPM] 1470 1476 1780 Slip [%] 2.00 1.60 1.11 Rated torque [kgfm] 7.41 7.38 6.12 Locked rotor torque [%] 220 270 300 Breakdown torque [%] 250 310 330 Service factor 1.25 1.25 1.25 80 K Temperature rise 80 K 80 K Locked rotor time 25s (cold) 14s (hot) 19s (cold) 11s (hot) 28s (cold) 16s (hot) Noise level<sup>2</sup> 61.0 dB(A) 61.0 dB(A) 64.0 dB(A) 25% 50% 91.0 90.4 89.5 Efficiency (%) 75% 91.4 91.4 91.7 91.4 100% 91.4 92.4 25% 0.69 0.62 0.63 50% Power Factor 75% 0.79 0.74 0.75 100% 0.85 0.81 0.82 Losses at normative operating points (speed;torque), in percentage of rated output power P1 (0,9;1,0) 9.0 9.0 7.9 P2 (0,5;1,0) 7.3 7.3 6.4 P3 (0,25;1,0) 6.9 6.9 6.0 Losses (%) P4 (0,9;0,5) 5.2 5.2 4.6 P5 (0,5;0,5) 3.5 3.5 3.1 P6 (0,5;0,25) 2.6 2.6 2.3 P7 (0,25;0,25) 1.9 1.9 1.6 Drive end Non drive end Foundation loads Bearing type 6309 C3 6209 C3 Max. traction : 247 kgf Sealing V'Rina V'Rina : 388 kaf Max. compression Lubrication interval 20000 h 20000 h 9 g Lubricant amount 13 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. Performed Checked Rev. **Changes Summary** Date Performed by Checked by Page Revision

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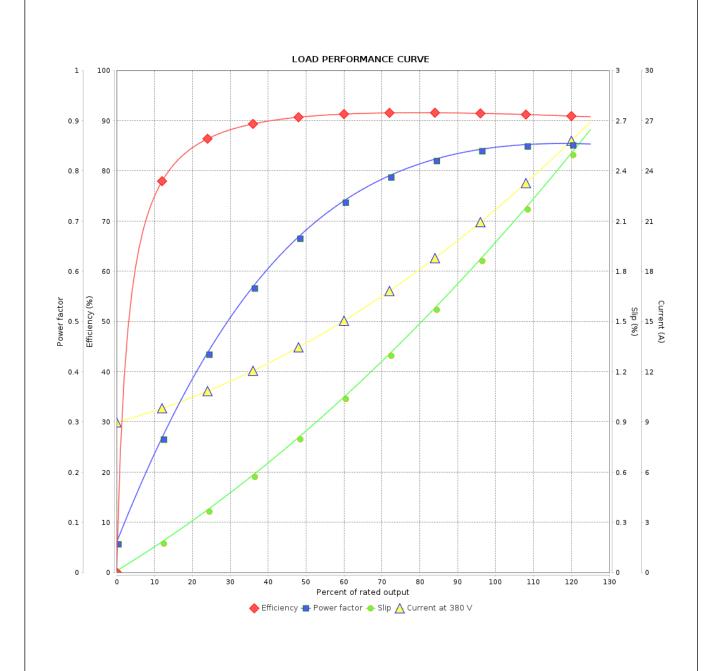
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12613699



Performance	: 380 V 50 Hz 4P				
Rated current	: 21.5 A	Moment of inertia (J)		: 0.1004 kgm²	
LRC	: 7.5	Duty cycle		: S1	
Rated torque	: 7.41 kgfm	Insulation class		: F	
Locked rotor torque	: 220 %	Service factor		: 1.25	
Breakdown torque	: 250 %	Temperature rise		: 80 K	
Rated speed	: 1470 rpm	Design		: N	
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# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



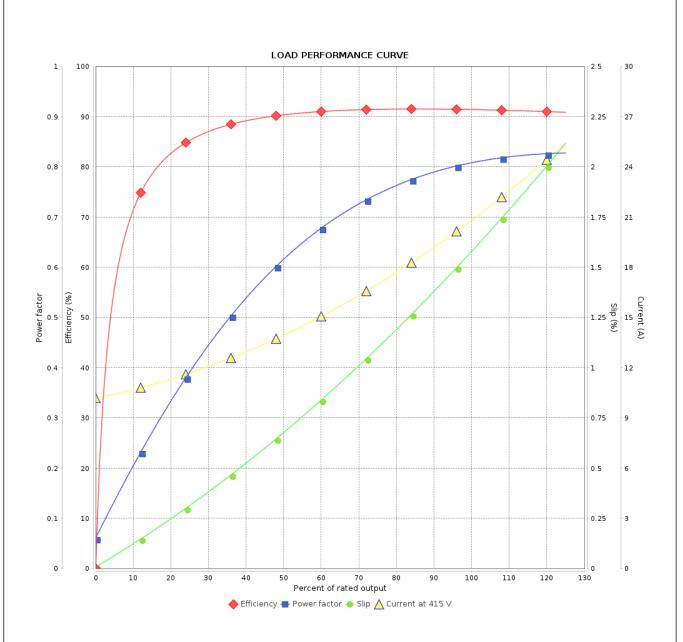
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14/01/2024

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12613699



Performance	:	: 415 V 50 Hz 4P				
Rated current LRC Rated torque Locked rotor tord Breakdown torqu Rated speed	: que :	20.7 A 8.5 7.38 kgfm 270 % 310 %	Moment of Duty cycle Insulation Service fa Temperate Design	class ctor	: 0.1004 kgm² : S1 : F : 1.25 : 80 K : N	
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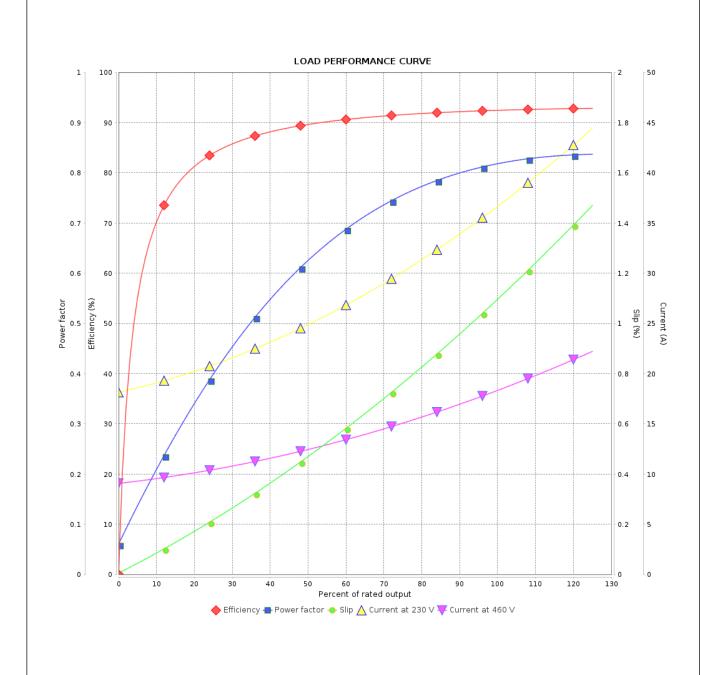
# LOAD PERFORMANCE CURVE

### Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12613699



Performance	: 2	30/460 V 60 Hz 4P				
Rated current	: 3	: 36.4/18.2 A Moment of ii		f inertia (J) : 0.1004 kgm²		
LRC	: 8	5.5	Duty cycle		: S1	
Rated torque	: 6	.12 kgfm	Insulation class		: F	
Locked rotor torque	e : 3	00 %	Service factor		: 1.25	
Breakdown torque	: 3	30 %	Temperature rise		: 80 K	
Rated speed	: 1	: 1780 rpm		Design		
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