

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 13000596			
Frame	: 315S/M	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: 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>	: 1056 kg		
Protection degree	: IP55	Moment of inertia (J)	: 3.34 kgm <sup>2</sup>		
Design	: N				
Output [HP]	100	100	100		
Poles	6	6	6		
Frequency [Hz]	50	50	60		
Rated voltage [V]	380	415	230/460		
Rated current [A]	142	133	244/122		
L. R. Amperes [A]	923	944	1854/927		
LRC [A]	6.5	7.1	7.6		
No load current [A]	56.0	63.2	112/56.0		
Rated speed [RPM]	992	993	1194		
Slip [%]	0.80	0.70	0.50		
Rated torque [kgfm]	73.2	73.1	60.8		
Locked rotor torque [%]	190	240	260		
Breakdown torque [%]	229	280	310		
Service factor	1.25	1.25	1.25		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	57s (cold) 32s (hot)	57s (cold) 32s (hot)	109s (cold) 61s (hot)		
Noise level <sup>2</sup>	67.0 dB(A)	67.0 dB(A)	70.0 dB(A)		
Efficiency (%)	25%				
	50%	93.7	93.7	94.1	
	75%	95.6	95.6	95.0	
	100%	95.6	95.8	95.0	
Power Factor	25%				
	50%	0.71	0.64	0.64	
	75%	0.80	0.76	0.75	
	100%	0.84	0.82	0.81	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	4.4	4.2	5.0	
	P2 (0,5;1,0)	3.0	2.9	3.5	
	P3 (0,25;1,0)	2.4	2.3	2.8	
	P4 (0,9;0,5)	2.8	2.7	3.2	
	P5 (0,5;0,5)	1.6	1.6	1.9	
	P6 (0,5;0,25)	1.3	1.2	1.5	
	P7 (0,25;0,25)	0.8	0.7	0.9	
Bearing type	: Drive end : 6319 C3	Non drive end : 6316 C3	Foundation loads		
Sealing	: WSeal	WSeal	Max. traction : 955 kgf		
Lubrication interval	: 13000 h	16000 h	Max. compression : 2011 kgf		
Lubricant amount	: 45 g	34 g			
Lubricant type	: Mobil Polyrex EM				
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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Customer : \_\_\_\_\_

Notes

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

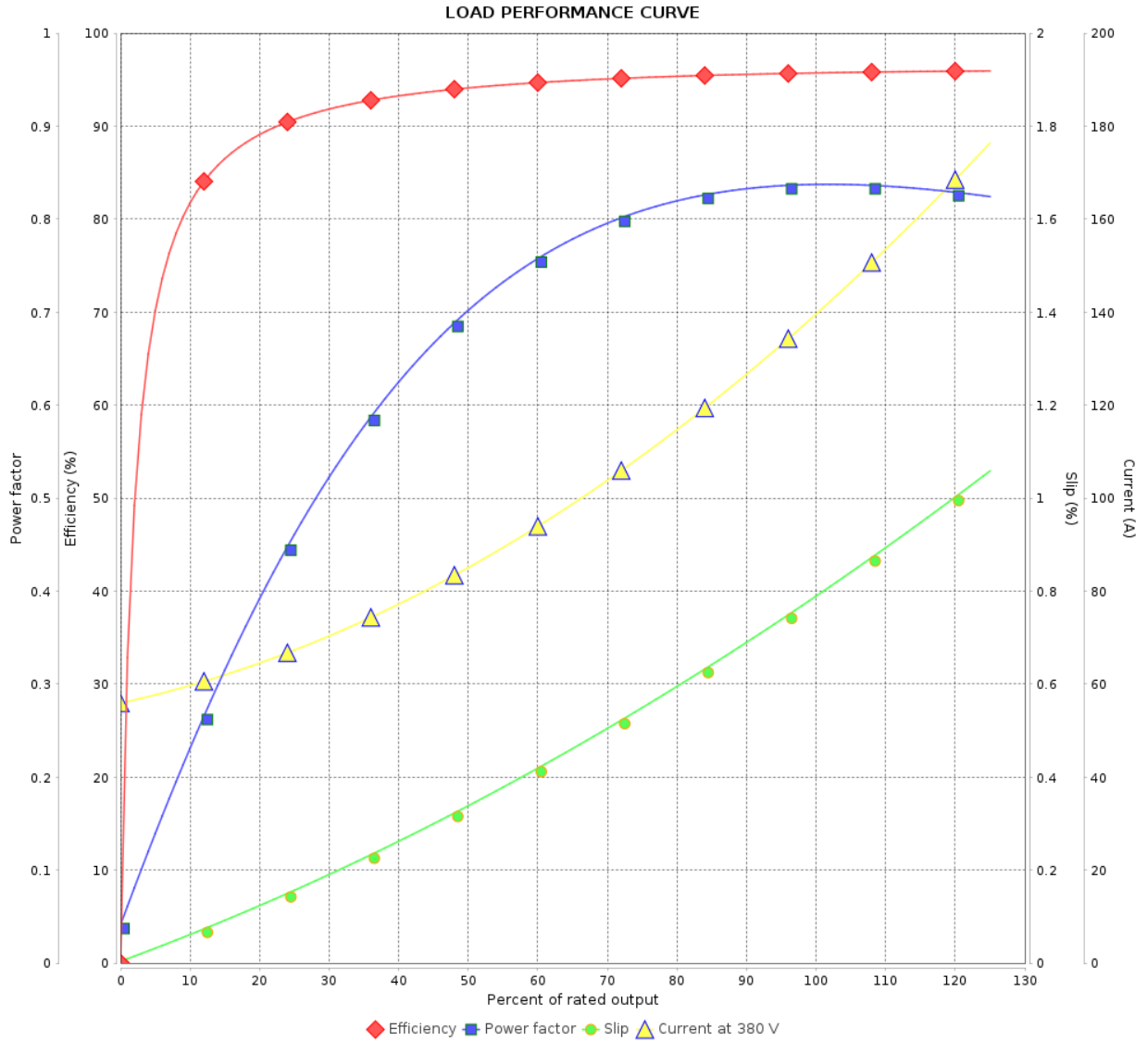


Customer : \_\_\_\_\_

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

13000596



Performance : 380 V 50 Hz 6P

Rated current : 142 A  
 LRC : 6.5  
 Rated torque : 73.2 kgfm  
 Locked rotor torque : 190 %  
 Breakdown torque : 229 %  
 Rated speed : 992 rpm

Moment of inertia (J) : 3.34 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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# LOAD PERFORMANCE CURVE

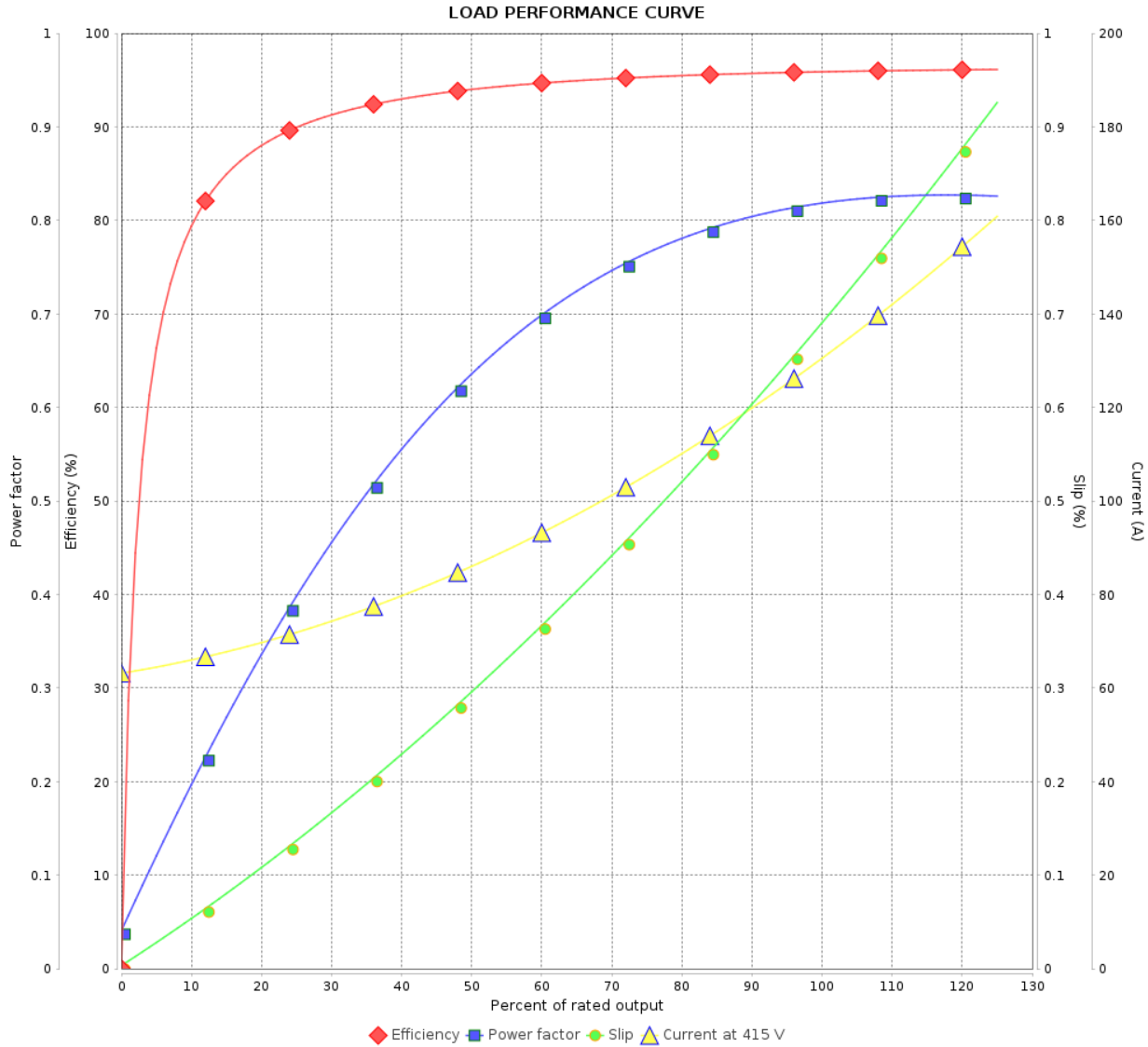
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Customer :

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 13000596



Performance : 415 V 50 Hz 6P

Rated current	: 133 A	Moment of inertia (J)	: 3.34 kgm <sup>2</sup>
LRC	: 7.1	Duty cycle	: S1
Rated torque	: 73.1 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 993 rpm	Design	: N

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# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage

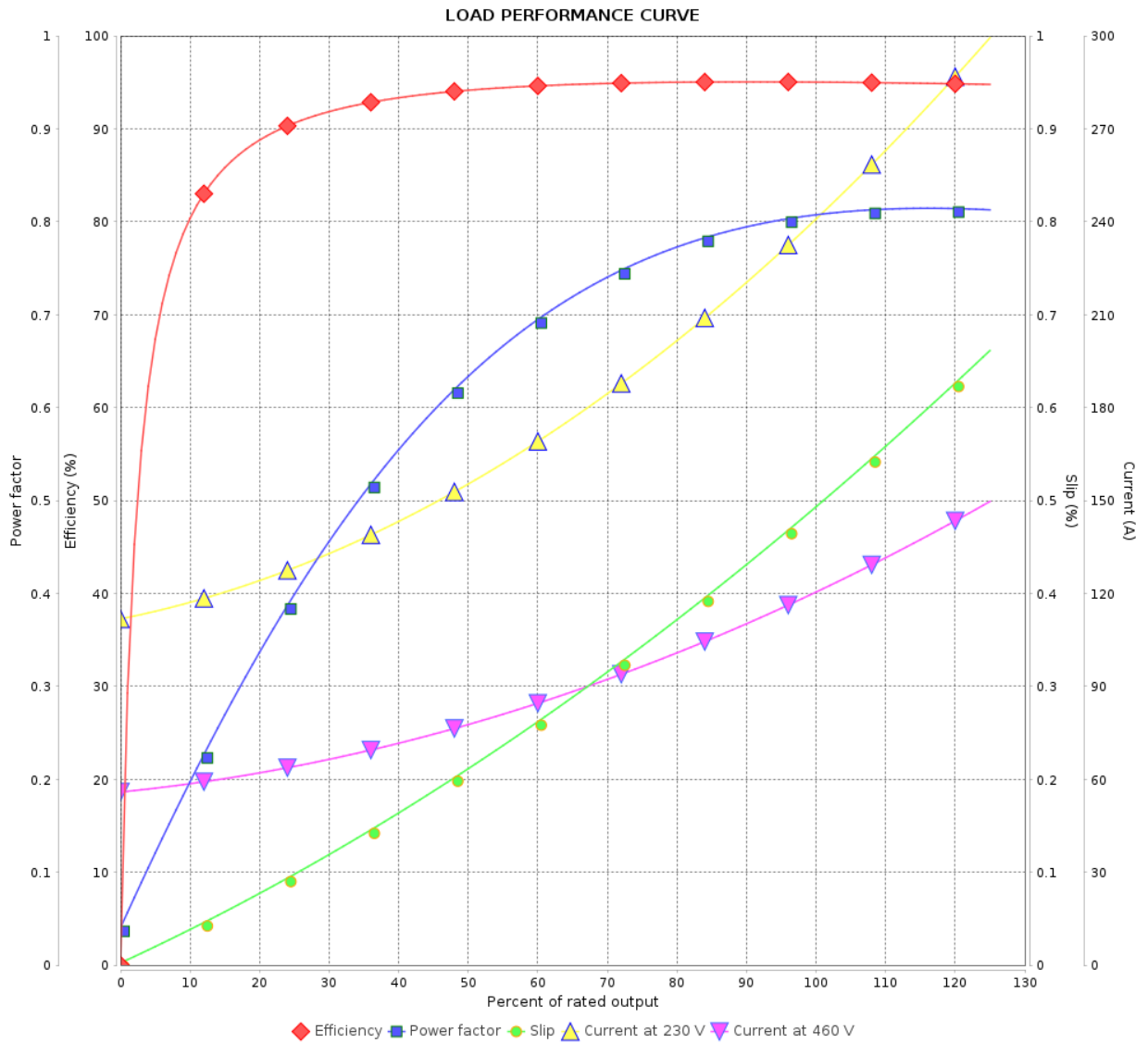


Customer : \_\_\_\_\_

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

13000596



Performance : 230/460 V 60 Hz 6P

Rated current : 244/122 A  
 LRC : 7.6  
 Rated torque : 60.8 kgfm  
 Locked rotor torque : 260 %  
 Breakdown torque : 310 %  
 Rated speed : 1194 rpm

Moment of inertia (J) : 3.34 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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