

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 13422162			
Frame : 71	Insulation class : F	Duty cycle : S1	Ambient temperature : -20°C to +40°C	Altitude : 1000 m.a.s.l.	
Protection degree : IP55	Design : N	Cooling method : IC411 - TEFC	Mounting : B3L(E)	Rotation <sup>1</sup> : Both (CW and CCW)	
Starting method : Direct On Line	Approx. weight <sup>3</sup> : 10.7 kg	Moment of inertia (J) : 0.0004 kgm <sup>2</sup>			
Output [HP]	0.5	0.5	0.5		
Poles	2	2	2		
Frequency [Hz]	50	50	60		
Rated voltage [V]	380	415	230/460		
Rated current [A]	0.876	0.840	1.54/0.772		
L. R. Amperes [A]	5.08	5.21	11.6/5.79		
LRC [A]	5.8	6.2	7.5		
No load current [A]	0.420	0.470	0.860/0.430		
Rated speed [RPM]	2810	2850	3455		
Slip [%]	6.33	5.00	4.03		
Rated torque [kgfm]	0.129	0.127	0.105		
Locked rotor torque [%]	200	240	280		
Breakdown torque [%]	220	280	310		
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)	21s (cold) 12s (hot)		
Noise level <sup>2</sup>	56.0 dB(A)	56.0 dB(A)	60.0 dB(A)		
Efficiency (%)	25%				
	50%	73.6	72.4	70.0	
	75%	73.8	73.8	73.4	
	100%	73.8	73.8	73.4	
Power Factor	25%				
	50%	0.69	0.63	0.63	
	75%	0.80	0.75	0.74	
	100%	0.87	0.83	0.82	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	32.2	32.9	32.9	
	P2 (0,5;1,0)	23.9	23.9	24.4	
	P3 (0,25;1,0)	23.9	23.9	24.4	
	P4 (0,9;0,5)	22.1	22.1	22.6	
	P5 (0,5;0,5)	13.0	13.0	13.2	
	P6 (0,5;0,25)	10.9	10.9	11.1	
	P7 (0,25;0,25)	7.1	7.1	7.3	
Bearing type : 6202 ZZ	Drive end : 6202 ZZ	Non drive end : 6202 ZZ	Foundation loads		
Sealing : V'Ring	V'Ring	V'Ring	Max. traction : 6 kgf	Max. compression : 16 kgf	
Lubrication interval : -	-	-			
Lubricant amount : -	-	-			
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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## Three Phase Induction Motor - Squirrel Cage



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

Notes

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

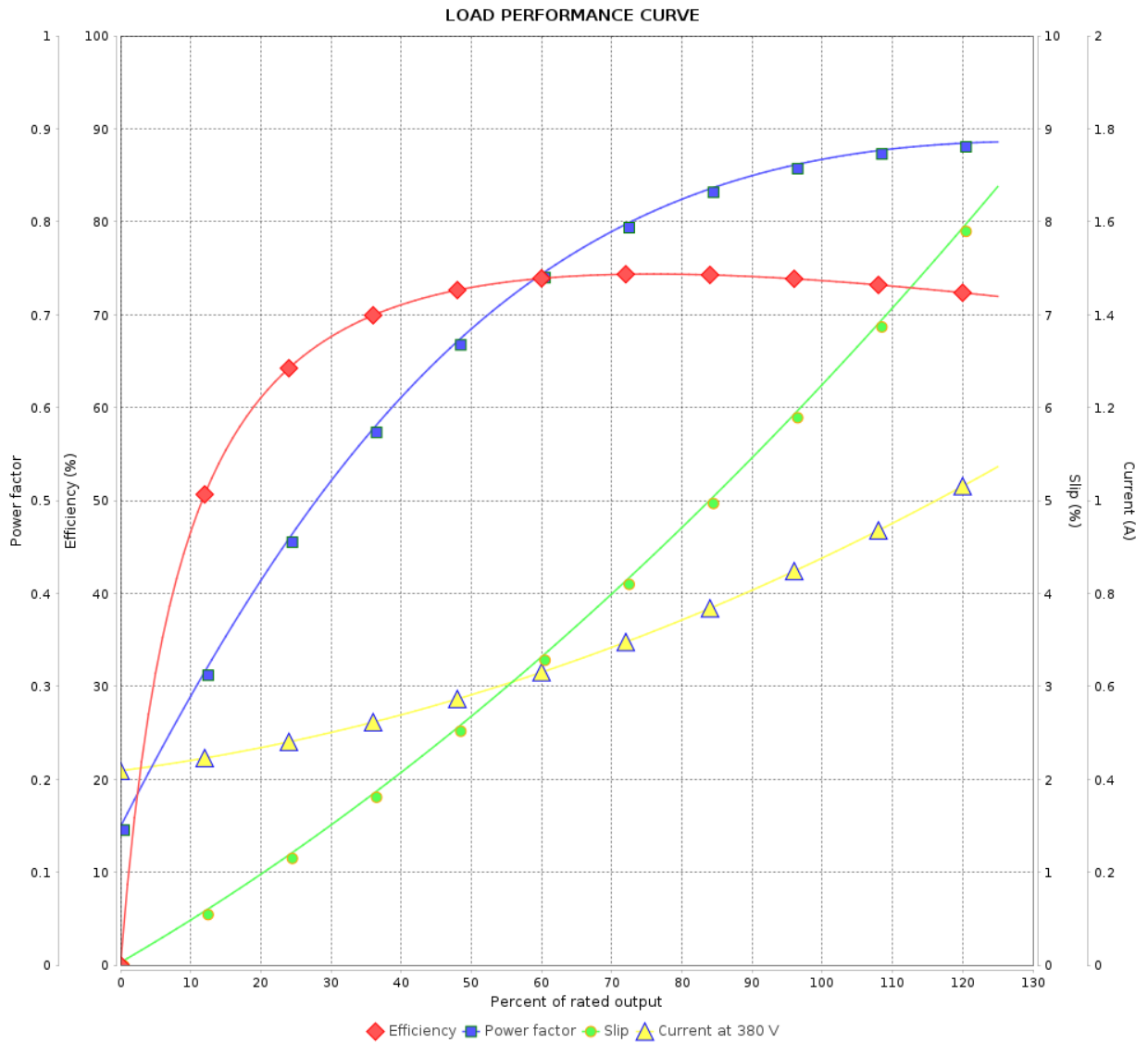


Customer : \_\_\_\_\_

Product line : W22 Tru-Metric IE3 Three-Phase

Product code :

13422162



Performance : 380 V 50 Hz 2P

Rated current : 0.876 A  
 LRC : 5.8  
 Rated torque : 0.129 kgfm  
 Locked rotor torque : 200 %  
 Breakdown torque : 220 %  
 Rated speed : 2810 rpm

Moment of inertia (J) : 0.0004 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

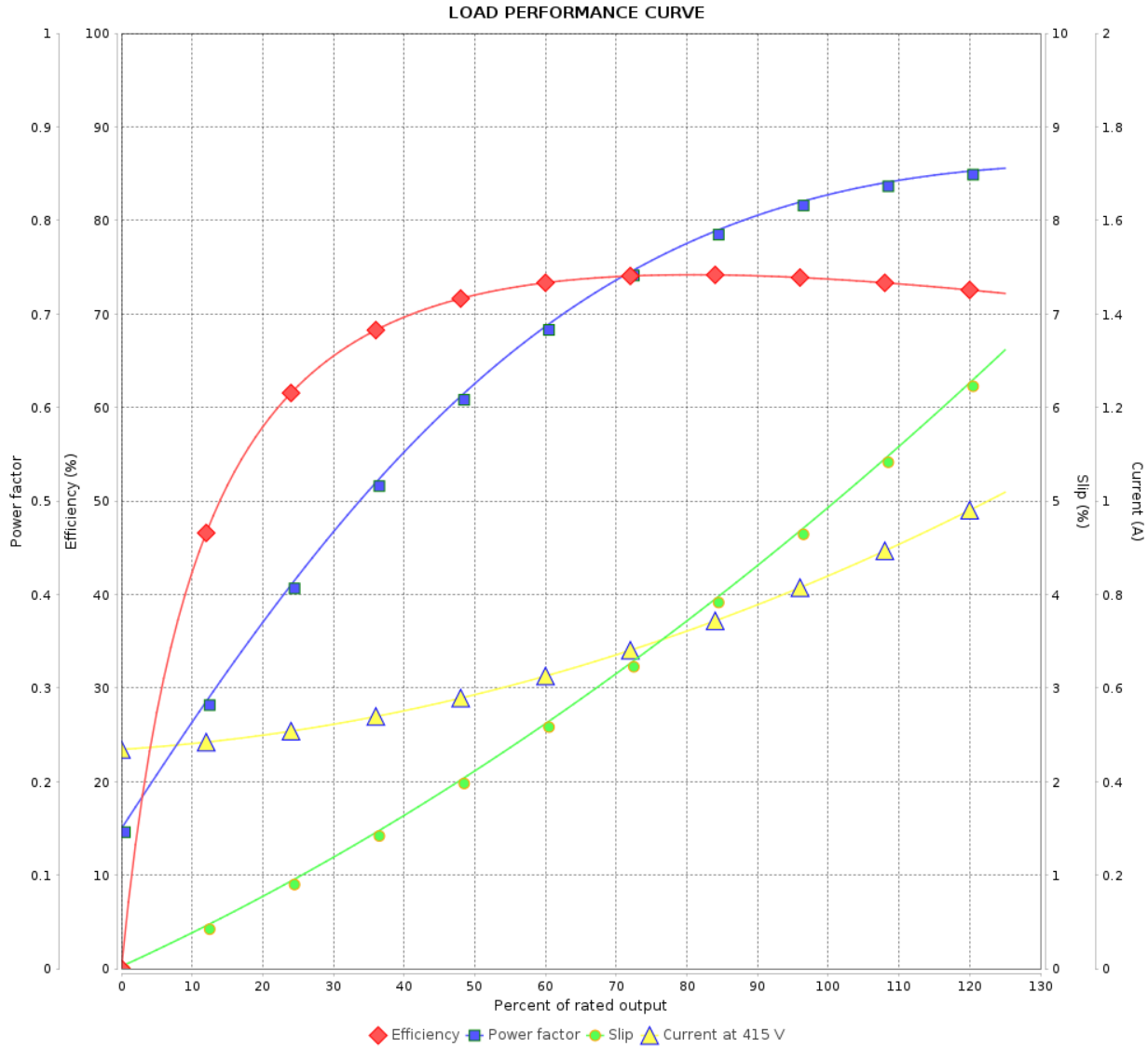
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 13422162



Performance : 415 V 50 Hz 2P

Rated current : 0.840 A  
 LRC : 6.2  
 Rated torque : 0.127 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 2850 rpm

Moment of inertia (J) : 0.0004 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

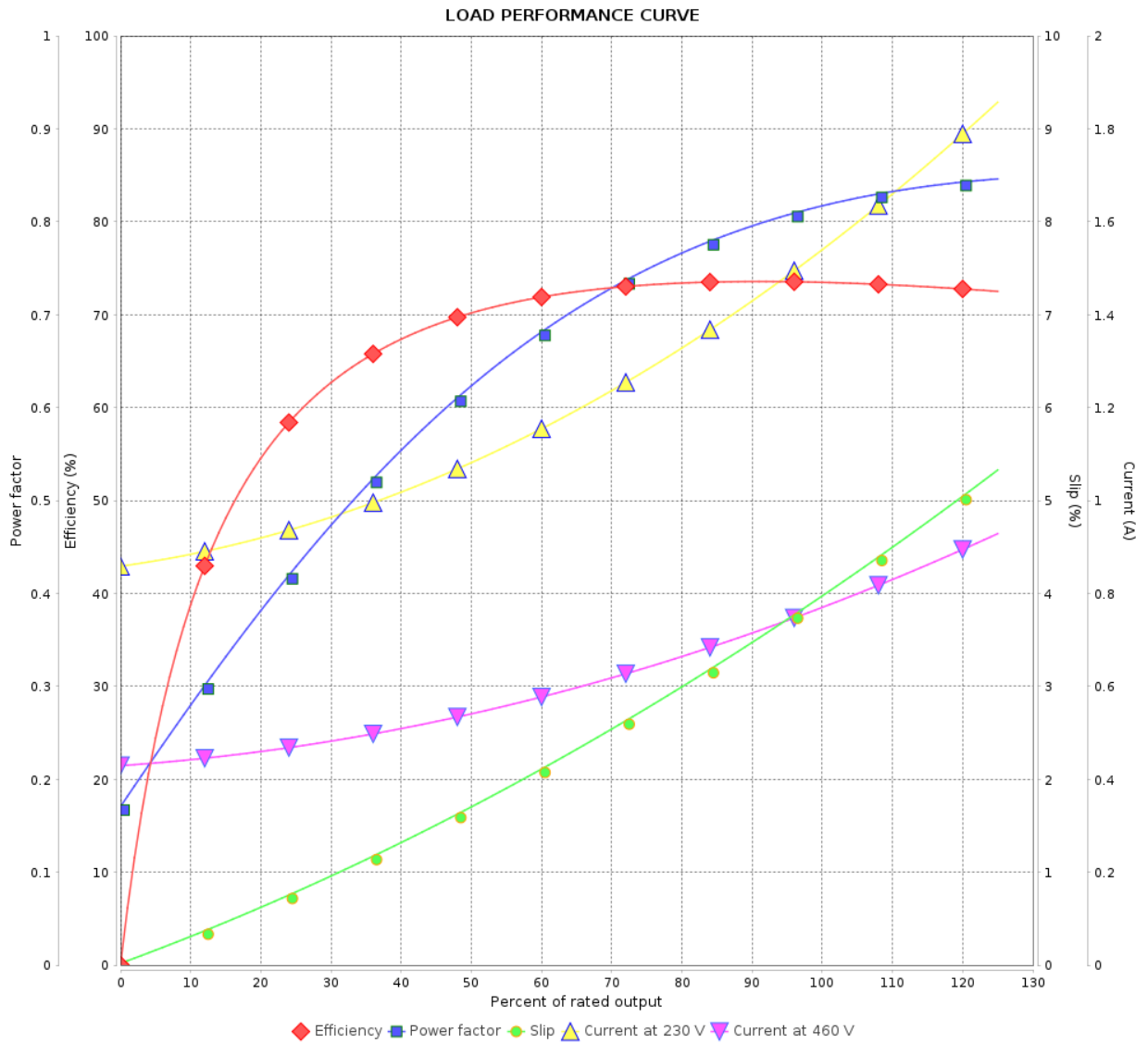
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 13422162



Performance : 230/460 V 60 Hz 2P

Rated current : 1.54/0.772 A  
 LRC : 7.5  
 Rated torque : 0.105 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 310 %  
 Rated speed : 3455 rpm

Moment of inertia (J) : 0.0004 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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