

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 Tru-Metric IE3 Three-Phase		Product code : 12690993			
Frame	: 100L	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B34L(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>	: 34.1 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0090 kgm <sup>2</sup>		
Design	: N				
Output [HP]	3	3	3		
Poles	4	4	4		
Frequency [Hz]	50	50	60		
Rated voltage [V]	380	415	230/460		
Rated current [A]	4.88	4.87	8.22/4.11		
L. R. Amperes [A]	36.1	40.9	75.6/37.8		
LRC [A]	7.4	8.4	9.2		
No load current [A]	2.20	2.50	4.40/2.20		
Rated speed [RPM]	1425	1440	1745		
Slip [%]	5.00	4.00	3.06		
Rated torque [kgfm]	1.53	1.51	1.25		
Locked rotor torque [%]	280	350	380		
Breakdown torque [%]	270	340	370		
Service factor	1.25	1.25	1.25		
Temperature rise	80 K	80 K	80 K		
Locked rotor time	39s (cold) 22s (hot)	36s (cold) 20s (hot)	41s (cold) 23s (hot)		
Noise level <sup>2</sup>	53.0 dB(A)	53.0 dB(A)	54.0 dB(A)		
Efficiency (%)	25%				
	50%	87.2	85.7	86.6	
	75%	87.1	86.8	88.2	
	100%	86.7	87.2	89.5	
Power Factor	25%				
	50%	0.57	0.49	0.54	
	75%	0.70	0.63	0.67	
	100%	0.79	0.72	0.75	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	14.4	13.8	11.0	
	P2 (0,5;1,0)	11.6	11.1	8.9	
	P3 (0,25;1,0)	11.1	10.7	8.5	
	P4 (0,9;0,5)	8.2	7.9	6.3	
	P5 (0,5;0,5)	5.5	5.3	4.2	
	P6 (0,5;0,25)	4.1	4.0	3.2	
	P7 (0,25;0,25)	3.0	2.8	2.3	
Bearing type	: Drive end 6206 ZZ	Non drive end 6205 ZZ	Foundation loads		
Sealing	: V'Ring	V'Ring	Max. traction	: 98 kgf	
Lubrication interval	: -	-	Max. compression	: 132 kgf	
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.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	14/01/2024			1 / 5	

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## Three Phase Induction Motor - Squirrel Cage



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

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	14/01/2024		2 / 5	

# LOAD PERFORMANCE CURVE

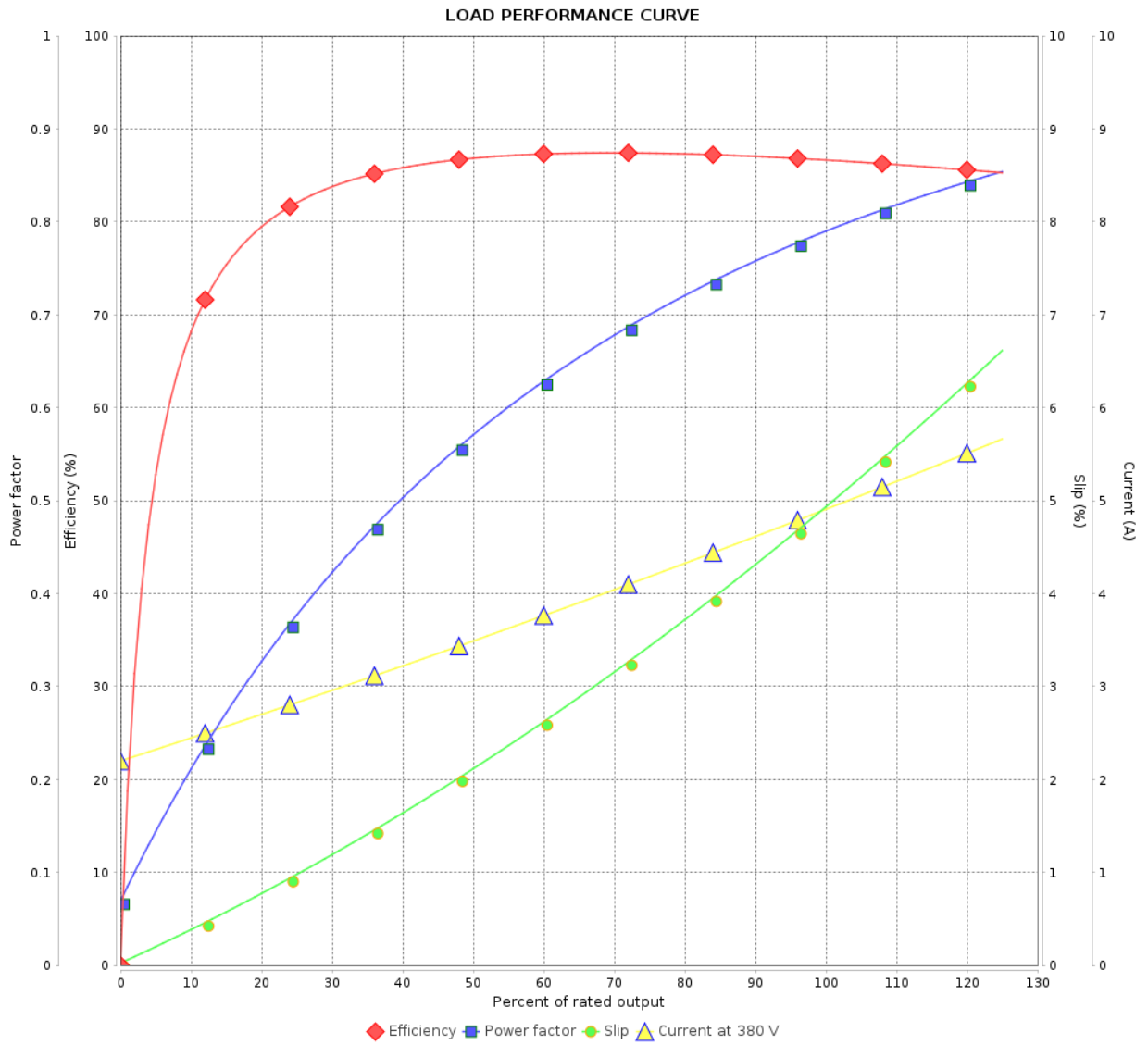
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 12690993



Performance : 380 V 50 Hz 4P

Rated current : 4.88 A  
 LRC : 7.4  
 Rated torque : 1.53 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 270 %  
 Rated speed : 1425 rpm

Moment of inertia (J) : 0.0090 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				

# LOAD PERFORMANCE CURVE

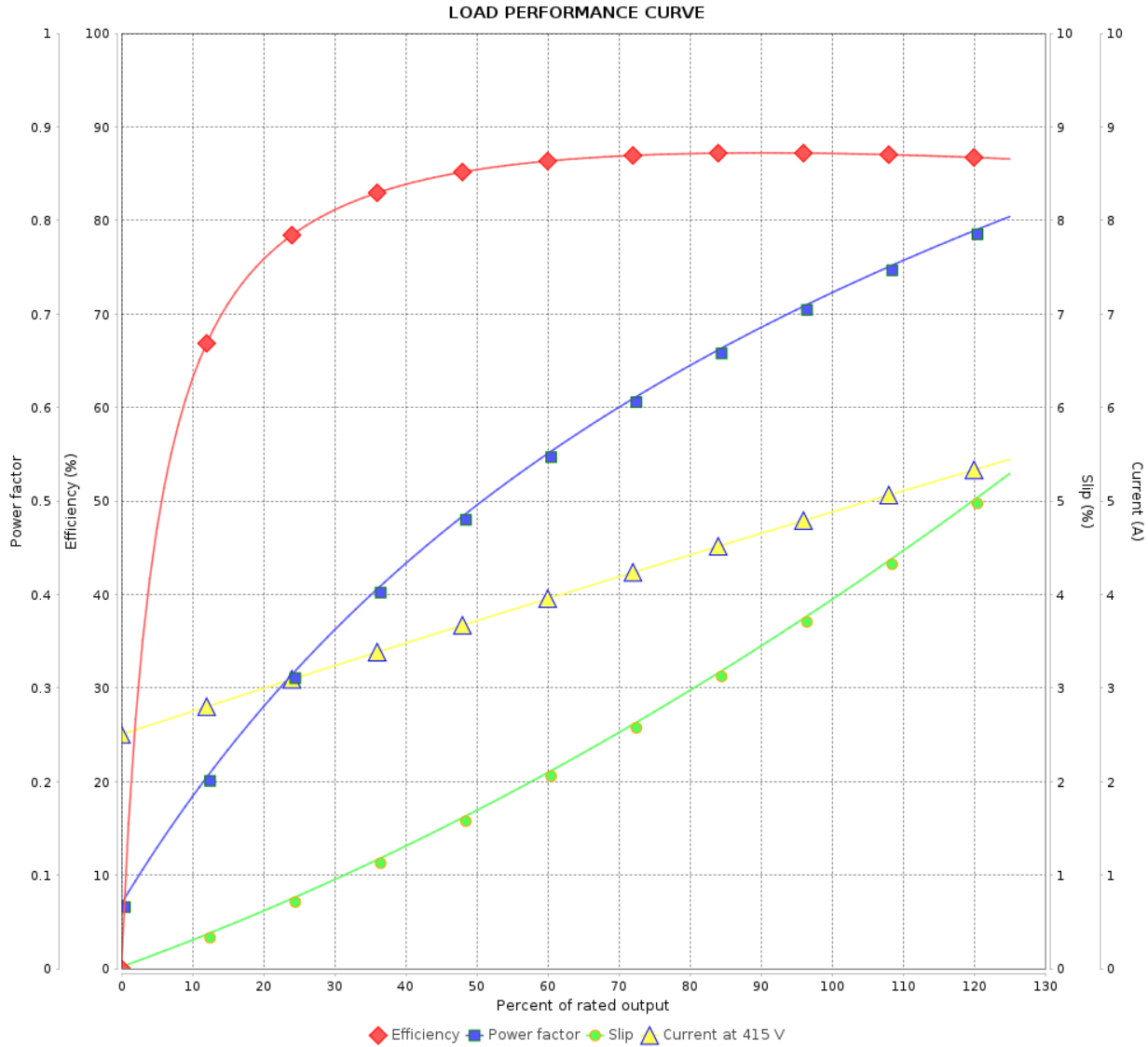
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 12690993



Performance : 415 V 50 Hz 4P

Rated current : 4.87 A  
 LRC : 8.4  
 Rated torque : 1.51 kgfm  
 Locked rotor torque : 350 %  
 Breakdown torque : 340 %  
 Rated speed : 1440 rpm

Moment of inertia (J) : 0.0090 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 5	Revision
Checked by				
Date	14/01/2024			

# LOAD PERFORMANCE CURVE

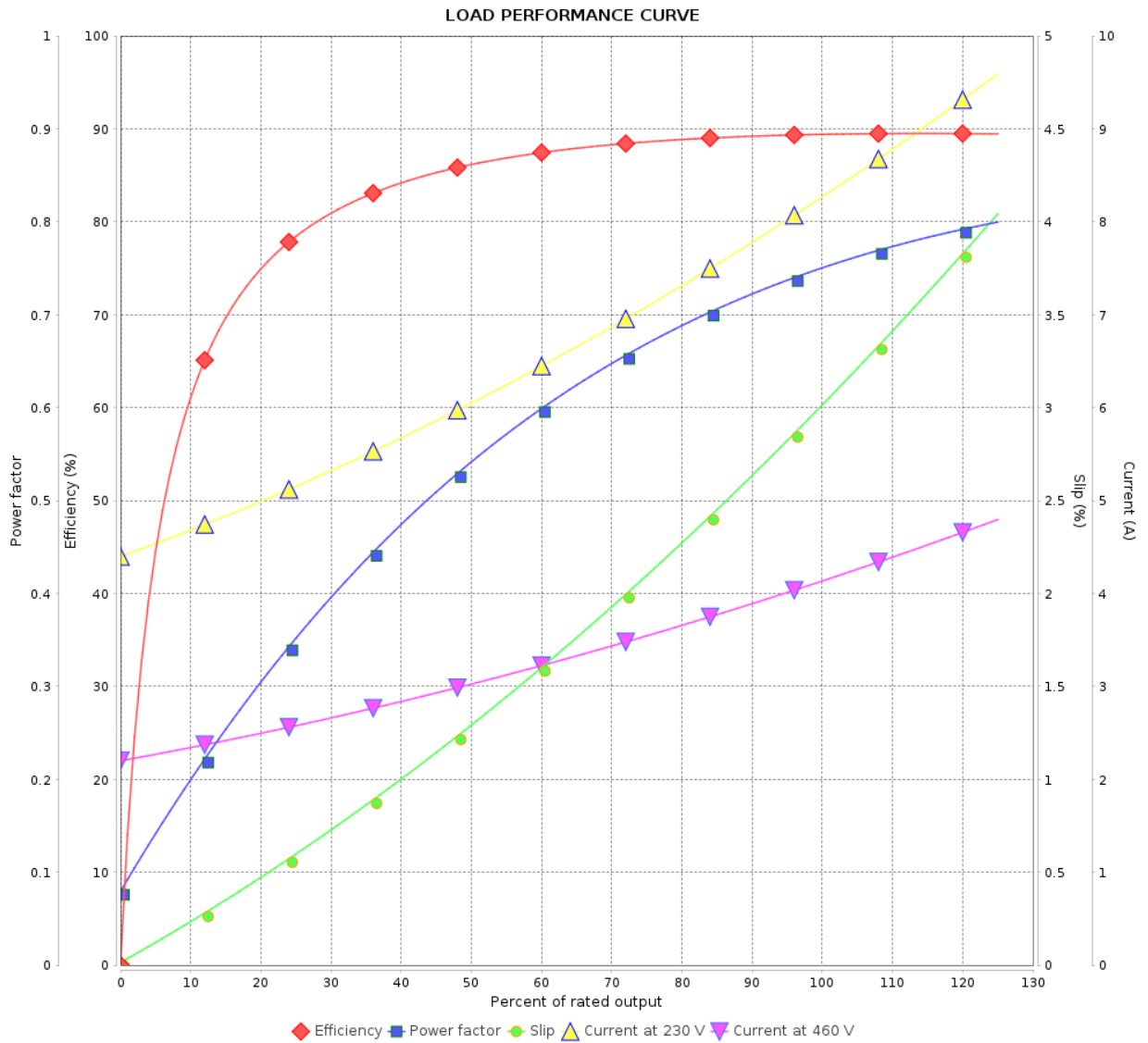
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 Tru-Metric IE3 Three-Phase

Product code : 12690993



Performance : 230/460 V 60 Hz 4P

Rated current : 8.22/4.11 A  
 LRC : 9.2  
 Rated torque : 1.25 kgfm  
 Locked rotor torque : 380 %  
 Breakdown torque : 370 %  
 Rated speed : 1745 rpm

Moment of inertia (J) : 0.0090 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
			5 / 5	